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Employee Engagement and Leadership in the Federal Sector

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Quanekqua Tequila Russell Pringle

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Walden University
2023

Abstract

Employee Engagement and Leadership in the Federal Sector

by

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MA, Roosevelt University, 2010

BS, Charleston Southern University, 2009

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

August 2023

Abstract

While levels of engagement have slightly increased, employee engagement in the U.S. federal government sector still significantly lags when compared to the private sector. When asked if organizational leaders generate high levels of motivation and commitment in the workforce, only 48% of U.S. federal government employees indicated a positive response. The purpose of this quantitative correlation study and primary research question was to determine to what extent, if any, does a relationship exist between perceptions of leadership communication and effectiveness and employee engagement in the U.S. federal government sector. The theoretical framework of this quantitative correlational study was informed by William A. Kahn's theory of personal engagement and the public service motivation theory. An online survey was employed, and a total of 139 participants were included in this study. To test the research hypothesis, a linear regression analysis was conducted. The findings suggest that there is a significant relationship between perceptions of leadership communication and effectiveness and levels of employee engagement; public service motivation and employee engagement; and trust in leadership and employee engagement in the U.S. federal government. These findings may help contribute to positive social change as improved engagement and leadership practices may enhance productivity and increase employee effectiveness in the federal workplace.

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Dedication

I am dedicating this tremendous accomplishment to my family. To my children, Alaya and Aliyas, thank you for being my motivation to achieve one of the highest academic qualifications and promote our family legacy. To my husband, Antwanne, thank you for being my biggest cheerleader. You gave me a reason not to quit and considered me a success from the very beginning. To my parents, Kenneth and Ladonna, thank you for the values that you instilled in me, not just in words but also in action. Watching how hard you worked to ensure that we had opportunities inspired me to strive for the best that life has to offer. No shortcuts!

To my late uncles, Billy and Tony, thank you for being true examples of humility and hard work. Although I wish that you were here to celebrate this moment, I know that you are in a better place. Rest in Heaven, W.A.R III for life! Lastly, thank you to my entire family for your unwavering support and prayers. I cannot thank everyone by name but know that you hold a special place in my heart. You never doubted me, and I am doing this for you, this is OUR legacy! “So now finish this, so that your eagerness in desiring it may be equaled by your completion of it, according to your ability” (2 Corinthians 8:11).

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Chapter 1: Introduction to the Study

In 1990, Professor William A. Kahn coined the term *engagement* to describe his theory on the lack of employee motivation and involvement in the workplace (Kahn, 1990). Specifically, Kahn used the term engagement/disengagement to explain the lack of fulfillment employees were experiencing at work. The goal of the theory of engagement was to emphasize the fact that motivating employees went beyond rewards and incentives, such as monetary awards (Kahn, 1990).

Employee engagement has been linked to several positive organizational outcomes and can be influenced by various organizational factors (Jha & Kumar, 2016). For one, effective leadership has contributed to increased levels of engagement and has been identified as a key driver of engagement (Chandani et al., 2016; Partnership for Public Service & Deloitte, 2016). Extensive research has been done on engagement in the private sector, and levels of engagement in the private sector are significantly higher than in the public sector. Federal employees have reported high levels of dissatisfaction with government leadership, and large numbers of employees rate their leadership as ineffective (Lavigna, 2013). Government employees are responsible for providing critical public services that impact national security, public health, and economic stability for the American public. To ensure an effective workforce and quality public services, more research is needed to examine employee engagement and effective leadership in the federal sector.

In this chapter, I provide a summary of the relevant literature on engagement and addresses the gaps in knowledge as they relate to the current study and leadership within

the federal sector. This chapter includes a statement of the research problem, an outline of the purpose of the study, a list of research questions and hypotheses, a summary of the theoretical framework, a rationale for the research method, a list of definitions, assumptions, delimitations and limitations, and implications for positive social change.

Background of the Study

The concept of employee engagement has been a topic of discussion and research since the establishment of the theory in the early 1990s by Professor William A. Kahn. Closely related to several other management concepts, employee engagement has been defined in a number of ways over the years. According to Chandani et al. (2016), an engaged employee is “one who produces results, does not change jobs frequently and more importantly is the ambassador of the company at all times” (p.1). Further, an engaged employee “understands the role in the business strategy, has a strong emotional connection and commitment for the organization, is more involved and strives for success and learning new things and is also a good team person” (Jha & Kumar, 2016, p. 26). Individuals who are engaged “experience high levels of energy and are enthusiastic about their work...[and] are absorbed in their work activities” (Bakker, 2015, p. 724). According to Bakker (2015), because of their positive state of mind, engaged workers often show excellent performance, typically outperform their colleagues who are less engaged, and are more creative in their work. Moreover, “engaged employees...exhibit organizational citizenship behaviors” and help their colleagues when in need (Bakker, 2015, p.724).

While levels of engagement have slightly increased, employee engagement in the U.S. federal government sector still significantly lags as compared to the private sector (Partnership for Public Service & Deloitte, 2016). When asked if organizational leaders generate high levels of motivation and commitment in the workforce, only 48% of U.S. federal government employees indicated a positive response (U.S. Office of Personnel Management, 2022). While there has been extensive research on leadership and engagement in the private sector, more research is needed to understand the relationship between aspects of leadership and employee engagement in the federal government sector.

Employee Engagement : A Multi-Dimensional Concept

Because of its correlation to other management concepts, it has been argued that engagement may not be a unique or well-defined concept. Despite these findings, other researchers (Mackay et al., 2016; Jha & Kumar, 2016) argue that engagement is a concept worthy of attention. Engagement is a compilation of several job attitudes that have been found to contribute to a high performing workplace, such as job satisfaction, job involvement, and organizational commitment (Mackay et al., 2016). In a study on the incremental validity of engagement, researchers suggest that employee engagement may function as a more direct predictor of employee effectiveness than any one single job attitude alone, as employee engagement was highly correlated with both job satisfaction, job involvement, and organizational commitment (Mackay et al., 2016). As related to job satisfaction, Jha and Kumar (2016) explained that engagement goes beyond employee satisfaction in that satisfaction encompasses things such as personal development goals

and success, while engagement involves a mutual employee-organization commitment and overall development. One method of measuring or gauging engagement is to assess an employee's level of job satisfaction, organizational commitment, involvement, emotional attachment, and feeling of empowerment (Jha & Kumar, 2016).

In his study of engagement, Bakker (2015) explained the differences between engagement and similar management constructs. He argued that engagement elements such as vigor, energy, and enthusiasm differ from other components of job satisfaction like happiness, contentment, and pleasure. He also argued that while job involvement and organizational commitment encompass a psychological identification and emotional attachment to the organization, an employee with high organizational commitment or work involvement may still lack the vigor and absorption characteristic of engagement. As related to workaholics who possess the drive to work excessively, he explained that engaged employees are more effective and are better at maintaining a work-life balance. Moreover, engaged employees are more collaborative and less likely to experience burnout than workaholics (Bakker, 2015).

Similar to Kahn's original theory of personal engagement, many researchers identify employee engagement as a multi-faceted/dimensional concept. Kahn coined *engagement*, specifically *personal engagement*, as a multi-faceted concept involving the cognitive, emotional, and physical self at work. Kahn (1990) defined personal engagement as an investment of self into the work role whereby engagement occurs when "people bring in or leave out their personal selves during work-role performances" (p. 694), and disengagement occurring when the employee "uncouples his or her true self

from his or her work role, and suppresses his or her involvement” (Bailey et al., 2015, p. 26). Since its conception, engagement has been referred to as “work engagement, job engagement, role engagement, organizational engagement, and self-engagement” (Bailey et al., 2015, p. 26).

From the perspective of a continuum or range, three levels of engagement have been distinguished: engaged, not engaged, or disengaged (Chandani et al., 2016; Jha & Kumar, 2016). Engaged employees are those who are passionate about and are actively working towards the organization’s mission or objectives; employees who are not engaged continue to participate in their work but lack passion or energy in fulfilling these organizational goals; disengaged employees are unhappy and actively express their dissatisfaction with the work. Amongst the engaged, there are different types such as intellectual engagement that specifically addresses employees’ dedication to improve work performance; affective engagement, which encompasses the positive feelings associated with completion of work; and social engagement through which employees openly discuss and express the desire to enhance or improve their work (Chandani et al., 2016; Jha & Kumar, 2016).

Problem Statement

The general problem addressed in this study is that public sector employees experience unique leadership challenges including frequently changing political leadership, hard-to-measure performance goals, bureaucratic decision-making, influential power of multiple external stakeholders, strict employment rules and regulations, budget constraints, and high visibility of government actions (Lavigna, 2013). These same

factors may also impact the levels of engagement for federal government employees (Lavigna, 2013). While levels of engagement have slightly increased in the federal sector, as compared to the private sector, which was rated at 77%, employee engagement in the U.S. federal government sector rated at 62% is still significantly lagging (McCarthy et al., 2020; Partnership for Public Service, 2019) according to data provided by employee research firm Mercer Sirota. Mercer Sirota supplies data used to create the private sector Best Places to Work engagement score and provides employee responses to twenty-nine questions that offer points of comparison with the federal government.

The specific problem addressed in this study is that only 48% of U.S. federal government employees indicated a positive response when asked if organizational leaders generate high levels of motivation and commitment in the workforce (U.S. Office of Personnel Management, 2022). The election of government officials and senior leaders often results in significant policy changes that directly impact the federal government workplace. During the first year of a new presidential administration, the turnover rate for Senior Executive Service (SES), the highest-level managers in government, increases to 9.6% (Bolton et al., 2017). In comparison, the average voluntary turnover rate in the entire U.S. overall is only between 12 and 15% per year (Zojceska, 2018). Voluntary turnover “can have detrimental effects on an organization... [such as] a loss of internal working knowledge, an interruption in work activities and productivity, increased costs associated with finding a suitable replacement, and a disruption to teamwork cohesion” (McCarthy et al., 2020, p. 1; Park & Shaw, 2013). As a public service industry largely reliant on human capital to provide services to support the American economy, employee

“turnover would likely have more detrimental effects on governmental performance than other nonservice organizations” (McCarthy et al., 2020, p. 2). Between 2011 and 2018, resignations or voluntary turnover accounted for 36% of all separations within the federal government (McCarthy et al., 2020; U.S. Office of Personnel Management, 2018). The highest rates of attrition were among entry-level employees and the Senior Executive Service (McCarthy et al., 2020; Partnership for Public Service, 2014). While both pay and job satisfaction have previously been cited as predictors, McCarthy et al. (2020) found that engagement factors such as employee perceptions of leaders, supervisors, and work experiences also predicted turnover intent. According to McCarthy et al. (2020), “losing the most experienced employees to turnover, the senior executives—the leaders of agencies—and the newer entry-level employees can result in organizational setbacks” (p. 2), such as loss of knowledge, skills, and strategic direction; instability and disruptions in the work environment.

Inversely, loss of entry-level employees minimizes the successful transfer of knowledge and succession planning (McCarthy et al., 2020; Calo, 2008). Federal agencies can reduce voluntary turnover “by encouraging organizational leaders to create a positive organizational climate that engages employees” (Hameduddin & Fernandez, 2019, p. 355). As rated in the 2016 Federal Employee Viewpoint Survey, effective leadership was among the lowest of categories surveyed (Partnership for Public Service & Deloitte, 2016). While there has been extensive research on leadership and engagement in the private sector, more research is needed to understand the relationship between aspects of leadership and employee engagement in the federal government sector.

Purpose of the Study

The purpose of this quantitative correlation study was to determine to what extent, if any, does a relationship exist between employee perceptions of leadership communication and levels of employee engagement in the U.S. federal government. The Employee Perceptions of Vision and Leadership scale measures employee perceptions of leadership's ability to communicate the vision of the organization; visibility within the workplace; ability to manage organizational change; understand quality and facilitate process improvement; and foster effective communication (Schmidt & Akdere, 2007). The Trust in Leaders Instrument assesses an employee's cognitive and affective trust in management and cognitive and affective trust in supervisor (Yang & Mossholder, 2010). The Utrecht Work Engagement Scale measures work engagement defined as a positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2006). The Public Service Motivation Scale measures an individual's drive to serve the public (Perry, 1996).

The target population for this study was permanent, non-supervisory U.S. Federal Government civilian employees. While past research (Kahn, 1990; Jha & Kumar, 2016; Lu et al., 2016; Popli & Rizvi, 2017) has focused on leadership and engagement in the private sector, the purpose of this quantitative correlation study and primary research question was to determine to what extent, if any, does a relationship exist between perceptions of leadership communication and effectiveness and employee engagement in the U.S. federal government sector.

Research Gap: Empirical Data

As public policy and management have entered the evidence age, it is increasing the importance of scientific evidence in decision-making at the federal, state, and local levels (Hall & Battaglio, 2018). Evidence-based decision-making should not just characterize health and science federal agency initiatives like those proposed by the Centers for Disease Control or the U.S. Department of Health and Human Services. It should also be characteristic of all public management practices and policies (Hall & Battaglio, 2018).

According to Jin and McDonald (2017), “there have been fewer engagement studies of government organizations [and] much of what has been written about employee engagement comes from the corporate sector” (p. 882). Although the concept of employee engagement has gained popularity both in research and in practice, there is a need for more empirically driven scholarly research (Shuck, 2011). Concerning OPM’s employee engagement initiative and perceptions of organizational performance, Hameduddin and Fernandez (2019, citing Kettl, 2005) asserted that while administrative government reforms are often championed and even implemented with considerable effort, little attention is given to test the efficacy of these initiatives. Hameduddin and Fernandez (2019) further suggested that public administration scholars work with practitioners to provide empirical evidence of the efficacy in order to inform discussions related to employee engagement as an administrative government reform. McCarthy et al. (2020) indicated that “the majority of the research on engagement and turnover intention in the public sector is derived from state and local government employees, rather than

[from] federal government employees” (p. 2). This study may help contribute to filling the gap in the literature by providing a deeper understanding of how government leadership influences employee engagement. These findings may contribute to a better understanding of the impact of leadership influence and overall improved employee engagement in the federal government sector.

Research Gap: Communication, Trust, and Engagement

Communication is one of the most significant activities in an organization (Rasheed et al., 2021). According to Rasheed et al. (2021), having a culture of effective communication enables organizations to control member behavior, foster motivation, provide for emotional expression, and provide information for decision-making. In a study on generating employee engagement in a public-private partnership, Reissner and Pagan (2013) found that managers use both directive and discursive means of communication to create an environment that fosters employee engagement. Based on their study, Reissner and Pagan (2013) found that employees respond positively to such communication because it makes them feel valued, involved, and enhances their desire to engage with the organization. Employees are more likely to participate or engage when they are kept informed of organizational developments (Reissner & Pagan, 2013). Using two-way communication and management behaviors, organizations can create a work environment and organizational culture that promotes employee engagement. This can be achieved by “(1) managers communicating strategic and operational matters to employees and (2) employees being able to communicate upwards with their managers” (Reissner & Pagan, 2013, p. 2744).

Holland et al. (2017) found that “both supervisor support and direct voice [were] positively associated with employee engagement” (p. 915), and that these relationships are mediated by trust in supervisory and senior management. The development of trust between an employee and their supervisor allows employees to make further emotional investments at work. Being able to gain employee trust is a fundamental component of effective leadership (Jiang & Luo, 2018). Consistent communication coupled with action can aid in fostering employee trust. Organizational leaders must become role models for communication and “organizations need to provide training workshops to [their] leaders on how to foster transparent communication with employees” (Jiang & Luo, 2018, p. 153). According to Jiang and Luo (2018), immediate supervisors “play a critical role in how employees perceive their organization’s transparency of communication” (p. 141).

According to Basit (2017), trust in a supervisor is a strong predictor of job engagement. Lower levels of employee trust in a supervisor can result in lower levels of employee job engagement. Research has shown that “trusting employees are more productive, have more energy at work, cooperate with their colleagues, and stay with the organization longer” (Rafiq et al., 2019, p. 618). Rafiq et al. (2019) found that trust mediated the relationship between employee engagement and turnover intention. In their study on employee engagement, Ugwu et al. (2014) found that organizational trust and psychological empowerment were predictors of work engagement. Additionally, Jiang and Luo (2018) found that employee engagement had a direct influence on the level of trust that employees had toward their organization, and authentic leadership had an indirect impact on employee engagement through transparent organizational

communication. According to Holland et al. (2017), “increased direct communication can facilitate increased employee engagement” (p. 924). Many studies on engagement and leadership communication and trust have been conducted within the private sector and outside of the U.S. (Basit, 2017; Jiang & Luo, 2018; Holland et al., 2017; Rafiq et al., 2019; Rasheed et al., 2021; Reissner & Pagan, 2013; Ugwu et al., 2014). More research is needed to better understand employee engagement, trust, and perceptions of leadership communication in the federal sector.

Research Question(s) and Hypotheses

RQ1: To what extent, if any, does a relationship exist between employee perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government?

H₀: There is no significant relationship between perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government.

H_a: There is a significant relationship between perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government.

RQ2: To what extent, if any, does a relationship exist between trust in leadership and employee engagement in the U.S. Federal Government?

H₀: There is no significant relationship between trust in leadership and employee engagement in the U.S. Federal Government.

H_a: There is a significant relationship between trust in leadership and employee engagement in the U.S. Federal Government.

RQ3: To what extent, if any, does a relationship exist between public service motivation and employee engagement in the U.S. Federal Government?

H₀: There is no significant relationship between public service motivation and employee engagement in the U.S. Federal Government.

H_a: There is a significant relationship between public service motivation and employee engagement in the U.S. Federal Government.

Theoretical Foundation

The theoretical framework of this study was informed by the existing theories within the field of employee engagement and motivation. More specifically, Kahn's employee engagement theory examines engagement from the perspective of the personal self and work performance roles (2013). Kahn identified this concept as personal engagement. According to Kahn and Heaphy (2013; c.f., Truss et al., 2013), an employee's level of engagement can be influenced by the contextual and interpersonal (or relational) factors within the workplace. This theory emphasized the importance of work relationships on the completion of work tasks. These relationships shape how employees perform and engage in their work. As stated by Kahn (1990),

People become physically involved in tasks, ...cognitively vigilant, and empathically connected to others in the service of the work they are doing in ways that display what they think and feel, their creativity, their beliefs and values, and their personal connections to others. (p. 700)

In his study on engagement, Kahn found a positive relationship between personal engagement and psychological meaningfulness. Psychological meaningfulness is experienced when people feel valued, that the work that they do makes a difference, and they are able to give back to their work and to others in exchange for feelings of heightened physical, cognitive, or emotional energy. These findings indicate that people were personally engaged in situations or work that result in increased psychological meaningfulness (Kahn, 1990).

Public Service Motivation Theory

As related to engagement and psychological meaningfulness, public service motivation describes an individual's drive to serve the public. These individuals are committed to public service and strive to make a positive impact on society through their work (Bakker, 2015; Pandey et al., 2017). Prior to them entering the public sector, outside factors such as parental influences, religious affiliation, professional memberships, and/or educational institutions can influence an individual's motivation to serve the public. Once employed, organizational factors such as job characteristics, incentives, organizational culture, and human resource practices may enhance or increase their desire to serve (Gould-Williams, 2016). Perry (1996) outlined six public service motives including attraction to public policy, commitment to public interest, social justice, civic duty, compassion, and self-sacrifice. Public service motivation has been positively correlated with organizational outcomes such as job satisfaction, public sector job choice, employee performance, organizational performance, organizational commitment, and low employee turnover (Ritz et al., 2016). Employees that possess a

high public service motivation are better able to manage the day-to-day job demands and work-related stressors because they have a willingness to sacrifice for the good of society as well as viewing the work that they do as meaningful and significant as they strive to help others (Bakker, 2015). According to Bakker (2015), more research is needed to understand the mechanism by which high public service motivation results in increased effort and performance and more research is needed to understand the relationship between public service motivation and daily work engagement and the ability to manage daily job demands.

Nature of the Study

A quantitative research method is an appropriate approach for addressing the research problem and research questions for this study. The purpose of this quantitative correlation study was to determine to what extent, if any, does a relationship exist between employee perceptions of leadership communication and effectiveness and employee engagement in the U.S. Federal Government. The independent variables are employee perceptions of leadership communication and effectiveness; employee's cognitive and affective trust in management and supervisor; and public service motivation. The employee Perceptions of Leadership Scale measures the leaders' ability to communicate the vision of the organization, visibility within the workplace, ability to manage organizational change, understand quality and facilitate process improvement, and foster effective communication. Public service motivation is defined as an individual's drive to serve the public. The dependent variable is employee engagement defined as a positive, fulfilling work-related state of mind that is characterized by vigor,

dedication, and absorption. A quantitative research method allows the researcher to explore the relationship or correlation between two or more variables and test a specific hypothesis concerning their relationship. A qualitative research method was not suitable for this study because the goal of qualitative research is to study a phenomenon or the lived experiences of participants in their natural setting (Arghode, 2012). The quantitative approach is most suitable to address the research problem and research questions for this study in determining a relationship among variables.

A correlational design is most appropriate for this research study in that it utilizes survey research in which participants respond to a set of questions about their perceptions of leadership and employee engagement. Rather than seeking a causal relationship, the goal of this research design is to allow the researcher to identify patterns and describe the relationship between variables (Frankfort-Nachmias & Nachmias, 2008). Because the purpose of an experimental research design is to determine causality through the random selection and control and manipulation of variables, an experimental design would not be appropriate to address the research problem and research questions for this study.

Definitions

For the purposes of this study, the definition of employee engagement offered by the Merit Systems Protection Board (MSPB) will be referenced. The Merit Systems Protection Board is a federal agency responsible for protecting the principles of civil service and federal government employees from political abuse and other prohibited personnel practices. In a study done on employee engagement in the federal sector, MSPB defined *engagement* as follows.

A heightened connection between employees and their work, their organization, or the people they work for or with. Engaged employees find personal meaning in their work, take pride in what they do and where they do it, and believe that their organization values them. (U.S. Merit Systems Protection Board, 2008, p. i)

Another important definition of *engagement* is offered by the Office of Personnel Management (OPM). The Office of Personnel Management is the federal agency responsible for the personnel administration and management of federal civil service. The Office of Personnel Management describes *engagement* as an “employee’s sense of purpose that is evident in their display of dedication, persistence, and effort in their work or overall attachment to their organization and its mission” (U.S. Office of Personnel Management, 2015, p.4).

There are several definitions of *employee engagement* among the literature as related to management theory and practice. While there is not one single definition shared amongst the research studies, there are mutual elements worth noting. Throughout the definitions on *engagement*, the common or reoccurring themes are that engaged employees have a personal and emotional connection to the organization, take pride in their work and would recommend their organization as a good place to work, value intrinsic rewards over the monetary benefits received for their work, and are closely attached to the organizational values (Lavigna, 2013, citing Rothwell, 2007).

Employee Engagement: A heightened connection between employees and their work, their organization, or the people they work for or with (U.S. Merit Systems Protection Board, 2008, p. i).

Senior Leadership: The heads of departments and agencies, as well as their immediate leadership teams; the teams typically include career executives and political appointees (Partnership for Public Service & Deloitte, 2016).

Federal Employee: An individual employed by the United States Federal Government.

Public Service Motivation: An individual's drive to serve the public (Bakker, 2015; Pandey et al., 2017).

Political Engagement: An individual's level of engagement and interest in political activity.

The Office of Personnel Management (OPM): The agency responsible for managing human resource and personnel policies and procedures within the federal government civilian sector.

Merit Systems Protection Board (MSPB): The judicial agency responsible for upholding the merit system's principles and protecting against prohibited personnel practices within the federal government civilian sector.

Prohibited Personnel Practices: A list of actions outlined in Title 5 of the United States Code that violate merit systems principles "through some form of employment discrimination, retaliation, improper hiring practices, or failure to adhere to laws, rules, or regulations" (Office of Special Counsel, n.d.), and places certain restrictions on management officials within the federal government. These practices include (1) discrimination, (2) considering inappropriate recommendations, (3) coercing political activity, (3) obstructing competition, (4) influencing withdrawal from competition, (5)

granting unfair advantage, (6) nepotism, (7) whistleblower retaliation, (8) other retaliation, (9) other discrimination, (10) veterans' preference, (11) violating rules that implement a merit systems principle, and (12) imposing nondisclosure agreement that prevents whistleblowing.

Merit Systems Principles: The set of principles “designed to ensure fair and open recruitment and competition and employment practices free of political influence or other non-merit factors” (The Office of Personnel Management, n.d.) within the federal civilian government sector.

Assumptions

In this study, data were collected using self-reported measures. Self-report measures are used to assess participant feelings or views on a particular subject. Participants were asked to complete the 24-item Public Service Motivation Scale, the 20-item Trust in Leaders Instrument, the Utrecht Work Engagement Scale (UWES) 9-Version, and the Organizational Vision and Leadership Survey (19 items). The assumption is that people will answer honestly and will not understate or overstate their responses. The surveys were distributed online through Survey Monkey, and prospective participants were potentially able to complete the survey in private without being influenced by external factors. An invitation to the online survey was distributed via Facebook to federal employee social media groups such as the Federal HR Peeps and Federal HR Professionals Facebook groups. A link to the online survey was also shared publicly on Facebook so that participants could share it with others. To recruit more participants, Centiment Audience Panel was employed. Centiment Audience Panel allows

researchers to obtain survey responses from a target audience. The Centiment Audience Panel tool finds survey panelists who meet the participant criteria. Volunteer survey participants received an email invitation from Survey Monkey to take the online survey, and the survey link was also shared on LinkedIn. Using the nonprobability snowball sampling technique, participants were asked to share the survey link with their acquaintances. Snowball sampling is a convenience sampling method that is used when it is difficult to gain access to participants with target characteristics (Naderifar et al., 2017). An invitation to the online survey was also posted to the Walden University Participation Pool virtual bulletin board. The survey was anonymous in that no personally identifiable information was collected. Because of this, the assumption was that participants would feel confident and secure enough to respond honestly. External factors, such as internal emotions or feelings of guilt, cannot be accounted for.

Regarding the results, the assumption was that the results or findings from this study sample can be generalized to other populations and settings within the federal government. The target population for this study was permanent, non-supervisory US Federal Government civilian employees. The results of this study may not be applicable to the private sector. The assumption was that the findings will contribute to a gap in the literature concerning federal employee engagement and perceptions of leadership communication and effectiveness, which may have implications throughout the public sector as well as within private industries.

Another assumption was that employees would be able to distinguish between middle management and senior leadership. Employees were provided with survey

instructions outlining the definitions of the survey items. The assumption was that employees will read and apply these instructions when responding to the survey items. It was also an assumption that they would understand these instructions. The definitions were clearly articulated, and the differences between the levels of management were clearly outlined.

As related to the survey method, the assumption was that the measures used are statistically valid and reliable (Perry, 1996; Yang & Mossholder, 2010; Schaufeli et al., 2006; Schmidt & Akdere, 2007). Validity indicates that the scale measures the variable that it was intended to measure, such as levels of employee engagement or public service motivation. Reliability indicates that the results of the scale are consistent and can be repeated with the same or similar results. Measures were pulled from the APA SysTest database in which pre-existing surveys have been empirically tested and used in previous research studies. The assumption was that the reported validity, and reliability ratings are accurate. The assumption was also that these measures are fitting and appropriate for the current study.

The last assumption was that the identified gap in knowledge will make a significant impact on research, theory, and practice. Based on the review of the literature, it is assumed that this is a topic worthy of attention and requires more examination. As outlined in the literature, these findings will be useful to federal human resource professionals, government leaders, research scholars, and practitioners.

Scope and Delimitations

The scope of the study includes seminal research conducted in 1990 and recent works through the current year. The following key word search terms were used to explore the existing research literature: *employee engagement, public sector, federal government, public service motivation, and leadership*. Pre-existing surveys taken from the APA PsycTESTS database were used to measure the independent and dependent variables. An invitation to the online survey was distributed via Facebook and shared publicly on Facebook so that participants could share it with others. An invitation to the online survey was also posted to the Walden University Participation Pool virtual bulletin board and LinkedIn. An email invitation was also sent to volunteer survey participants via the Centiment Audience Panel tool. The online survey included the 24-item Public Service Motivation Scale, the 20-item Trust in Leaders Instrument, the Utrecht Work Engagement Scale (UWES) 9-Version, and the Organizational Vision and Leadership Survey (19 items). Demographic information such as agency, tenure/length of service, grade level, career level/supervisory status, job series, gender, race and ethnicity, age, and duty location were collected. The results of this study may be generalizable in that the population sample should be representative of the typical Federal Government employee. The general population is U.S. Federal Government civilian employees. The target population for this study will be permanent, non-supervisory U.S. Federal Government civilian employees. The sample was drawn from within this target population. A survey method potentially allows the researcher to collect a large amount of data in a short amount of time.

Limitations

In this study, correlational data were used to assess the relationship between variables. Due to the nature of the study, a causal relationship cannot be established. The results of this study are limited to this extent. Despite this limitation, if there is evidence of a correlation, the results of this study can contribute to a deeper understanding of the relationship between employee engagement and perceptions of leadership within the federal government.

The sample size included in this study may also be a limiting factor. Small sample size may impact the statistical power of the overall findings. When employing statistical methods, “research hypotheses can never be proven; rather, they can only be disproved (rejected)...a null hypothesis is considered false and is rejected in favor of an alternative when $p < [\text{is less than alpha}] \alpha$ ” (Steidl et al., 1997, p. 271). When a determination is made whether to reject a null hypothesis and accept the alternative, one of two types of errors can be made. A Type I error occurs when a null hypothesis that is true is rejected. A Type II error occurs when a null hypothesis that is false might not be rejected. The probability of a Type II error occurring is delineated as β . Statistical power is equal to $1 - \beta$ and is defined as the “probability of correctly rejecting a null hypothesis that is false” (Steidl et al., 1997, p. 271). Power is “conventionally set at .80, which implies that a study investigating a true effect will correctly reject the null hypothesis 80% of the time and will report a false negative (commit a Type II error) in the remaining 20% of cases” (Brydges, 2019, p. 2). Cohen’s five-eighty convention, which is representative of alpha

=.05 and 80% power, is typically used as the standard for determining sample size (Sakai, 2016, Brydges, 2019, & Di Stefano, 2003).

The participants of this study include current civil service employees working within the U.S. Federal Government. Every effort was made to obtain a large enough sample size to achieve a representation of the total federal government civilian employee population. According to the Office of Personnel Management, the US government is comprised of over two million civilian employees (Jennings & Nagel, 2018; Willhide, 2014), not including the US Postal Service (Governing, 2018). Using G*Power, the linear multiple regression test was selected to conduct an a priori power analysis. Based on Cohen's *d* as a guideline in statistical testing, a value of 0.20 would represent a small effect size, 0.50 a medium effect size, and 0.80 a large effect size (Brydges, 2019). Using a medium effect size and five predictors, a sample size of at least 139 was required to achieve 80% power.

The survey method used may not capture potentially useful qualitative data or narrative responses that would contribute to a deeper understanding of the relationship between the variables. A quantitative approach was selected to achieve the benefit of obtaining large amounts of data in a short amount of time. The survey used gauged participant attitudes on a five to seven-point scale. The purpose of this quantitative correlation study was to investigate the relationship between employee engagement and perceptions of leadership communication and effectiveness within the US federal government sector. Based on the instruments that were utilized to examine the variables, it was predicted that high research validity would be achieved.

Significance of the Study

In a presidential memorandum directed toward the heads of executive departments and agencies, former President Barack Obama outlined targeted workplace initiatives toward improving productivity and employee engagement in the federal workplace (The White House, 2014). In the 2014 annual Federal Employee Viewpoint Survey, the Office of Personnel Management incorporated an employee engagement measure in support of the president's management agenda. While there was a slight increase in engagement across the government between 2014 and 2019, engagement in the public sector is still significantly lower (62%) in comparison to the private sector (77%; McCarthy et al., 2020; Partnership for Public Service, 2019). According to research by Dale Carnegie, disengaged employees are two and a half times more likely to leave for any level of pay increase, even an increase as low as five percent, as compared to engaged employees (Porges, 2013). It is estimated that disengagement in the federal government costs up to \$65 billion taxpayer dollars in lost employee productivity per year (Rivera & Flinck, 2011). According to Rivera and Flinck (2011), "making the case for employee engagement can be extremely challenging in the federal government" (p. 486). Getting federal agency leaders to examine and invest in data related to employee engagement can be difficult for federal Human Resource Development scholar-practitioners. In an environment solely driven by mission success, coupled with the expectation to do more with less, it can be a challenge for agency leaders to realize that "mission success is only possible through collective employee success" (Rivera & Flinck, 2011, p. 486). For many agencies, performance data are often limited and very rarely are

easily reported. This can add to the challenge of understanding and communicating the relationship between employee engagement and performance outcomes in the federal government (Rivera & Flinck, 2011; U.S. Merit Systems Protection Board, 2012).

Significance to Theory

According to Dale Carnegie's research, the top three factors that impact levels of employee engagement are pride in the organization; trust in senior leadership; and relationship with an employee's immediate manager (Marone, 2020). Almost 50% of employees reported being disengaged if they perceived their manager to be disengaged. Organizational leaders must be models of the culture they are seeking to establish. Employee engagement requires a commitment from management at every level of the organization. Organizational teams with managers who make employee engagement a daily priority were almost three times more engaged than teams whose managers did not (Marone, 2020). Sixty-one percent of employees who had confidence in their leadership abilities and believed that senior leaders are moving the organization in the right direction were fully engaged (Porges, 2013).

This study may help contribute to filling the gap in the existing literature and empirical research on employee engagement in the federal government workplace by providing a deeper understanding of how leadership influences employee engagement in the public sector. According to the Partnership for Public Service Best Places to Work survey, effective leadership has been identified as a key driver of federal employee engagement since the Best Places to Work survey was first established in 2003. The Best Places to Work survey category includes a ranking of federal employee views of their

supervisors, fairness, empowerment, and senior leaders. In 2019, effective leadership was ranked as the second-lowest category (Partnership for Public Service, 2021a). An empirical study of engagement and leadership in the federal sector can help to inform the existing body of knowledge and provide a foundation for future research.

Significance to Practice

Employee engagement has been linked to positive business outcomes such as productivity, profitability, and customer engagement (Sorenson & Garman, 2013; Marone, 2020; U.S. Merit Systems Protection Board, 2009). Conversely, actively disengaged employees who are emotionally disconnected may actively work against their employers' interests. Disengaged employees are less productive and more likely to steal from their organization, negatively influence their coworkers, miss workdays, and drive customers away (Sorenson & Garman, 2013). Gallup estimates that actively disengaged employees cost the U.S. up to \$550 billion per year in lost productivity (Sorenson & Garman, 2013). According to Gallup, managers are primarily responsible for their employees' engagement and should be selected to leadership positions based on their ability to effectively manage employee engagement (Sorenson & Garman, 2013). Engagement should be embedded into the daily organizational activities and management-employee interactions. Organizations should provide coaching and hold managers accountable for their employees' engagement and managers should be required to build engagement plans (Sorenson & Garman, 2013).

These findings may inform professional practice in that they may help managers understand how leadership behaviors increase or decrease employee engagement. This

study may contribute to the development of management consulting strategies and future research in this field. Federal leaders compete with the private sector when recruiting for top talent. Having an organizational culture that fosters high levels of employee engagement can help agencies attract and retain their top performers. According to the Partnership for Public Service (2021b), “having a highly motivated and engaged workforce is critical to a well-functioning government and the success of our country” (para 6).

An engaged federal workforce has the potential to provide better services to the American public. The results of this study may have a significant impact on employees, managers, and human resource professionals within the public sector. It may be useful to OPM and the MSPB in achieving its goals towards increasing engagement. These findings may contribute to a better understanding of the impact of leadership strategy and overall improved employee engagement in the federal sector. This may have positive implications for social change in that improved engagement may result in enhanced organizational effectiveness within the federal workforce.

Significance to Social Change

According to the American Institute of Stress (2002 as cited by Halbesleben et al., 2006), “stress and burnout accounted for about 300 million lost working days [costing] American businesses an estimated \$300 billion per year” (p. 244). Burnout can be defined as a “psychological response to chronic work stress characterized by emotional exhaustion (a depletion of emotional and physical resources), disengagement (detachment from the job), and reduced feelings of personal job-related efficacy” (Halbesleben et al.,

2006, p. 245; Maslach, 1982). Maslach (1982) described burnout as a type of job stress or “syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do ‘people-work’” (p. 2). Like other job stressors, burnout may result in similar adverse effects for an individual; however, burnout is unique in that it is the direct consequence or result of the social interaction between a “helper” and its “recipient.” The emotional exhaustion or depletion of emotional and physical resource occurs when a person “feels overwhelmed by the emotional demands imposed by other people” (Maslach, 1982, p. 3). Once an individual experiences emotional exhaustion, they may feel that they are no longer able, or lack the motivation to, give of themselves to others (Maslach, 1982). According to Maslach (1982), job engagement is the positive opposite of burnout.

This study may contribute to positive social change in that better understanding of leadership and employee engagement may lead to increased job satisfaction and overall productivity in the workplace. Job burnout and work stress can have a negative impact on both employees and their families. Individuals spend a significant amount of time at work and can encounter challenges related to work-life balance and employee well-being. When compared to the private sector, public sector organizations experience a perceived higher stress (Breugh, 2021). “Political and administrative changes associated with new public management such as performance-based reforms, cutbacks, red tape, work intensification due to budgetary constraints, and tighter deadlines have all been associated with creating cultures of higher stress in public organizations” (Breugh, 2021, p. 87). As a result of the economic crisis, there is an “increased need for public organizations to cut

back on expenses and improve efficiency” (Voet & Vermeeren, 2017, p. 230). According to Voet and Vermeeren (2017), cutbacks can have a negative impact on the organizational commitment and work engagement of public sector employees. Cutbacks may result in a decrease in job satisfaction and morale and an increase in work-related stress and intention to leave (Voet & Vermeeren, 2017; Levine, 1984). A motivated and efficient civil service is necessary for good governance. The civil service is critical in the implementation of economic policy reform, management of public expenditure and revenue, and sustainability of public finances. Access to public goods and services depends on the skills and motivation of the civil servants who provide these services (Rao, 2013). Organizational culture, and specifically an increase in employee engagement, can have a positive impact on employee morale and job satisfaction in the federal workplace.

Summary and Transition

Chapter 1 included a statement of the research problem and the purpose of the study. While past research has focused on engagement and leadership in the private sector, the purpose of the current study was to examine the relationship between perceptions of leadership communication and employee engagement within the federal sector. The research questions and hypotheses were outlined with a summary of the theoretical framework and a rationale for the research method. A list of definitions, assumptions, delimitations and limitations, and implications for positive social change were also presented in this chapter. Chapter 2 includes a review of the existing scholarly literature related to employee engagement, public sector motivation, political

engagement, and perceptions of leadership. Professor William A. Kahn's (1990) theory of personal engagement and the public service motivation theory (Perry, 1996) will also be discussed in more detail in this chapter.

Chapter 2: Literature Review

Effective organizational leadership has been consistently identified as a key driver of employee engagement (Chandani et al., 2016; Partnership for Public Service & Deloitte, 2016). Developing a workforce that is engaged, innovative, and productive is a top priority for federal government senior leaders (U.S. Office of Personnel Management, 2016). Government employees are relied upon to provide critical services to the American public such as safeguarding national security, supporting war defense missions, and managing public health care (Lavigna, 2013). Engaged employees exhibit higher levels of commitment to the organization and are more likely to provide quality customer service (Kumar & Pansari, 2016). While levels of engagement have slightly increased as compared to the private sector, employee engagement in the federal sector is still significantly lagging (62%, 77%, McCarthy et al., 2020; Partnership for Public Service, 2019). Among survey categories, effective leadership was among the lowest, as rated in the 2016 Federal Employee Viewpoint Survey (Partnership for Public Service & Deloitte, 2016). When asked if organizational leaders generate high levels of motivation and commitment in the workforce, only 48% of employees indicated a positive response (U.S. Office of Personnel Management, 2022).

The election of government officials and senior leaders may result in significant policy changes that directly impact the federal workplace. During the first year of a new presidential administration, the overall rate of federal employee turnover is between 6.1 and 6.5% (Bolton et al., 2017). The general problem is that public sector employees face unique leadership challenges including frequently changing political leadership, hard-to-

measure performance goals, bureaucratic decision-making, influential power of multiple external stakeholders, strict employment rules and regulations, budget constraints, and high visibility of government actions. All these factors may impact the levels of engagement for federal employees (Lavigna, 2013). The specific problem addressed in this study is that only 48% of U.S. federal government employees indicated a positive response when asked if organizational leaders generate high levels of motivation and commitment in the workforce (U.S. Office of Personnel Management, 2022). While there has been extensive research on leadership and engagement in the private sector, more research is needed to understand the relationship between employee engagement and aspects of leadership in the federal sector.

The purpose of this quantitative correlation study was to determine to what extent, if any, there is a relationship between perceptions of leadership communication and effectiveness and employee engagement in the U.S. federal government sector. While past research has focused on leadership and engagement in the private sector, the purpose of the current study was to examine the relationship between perceptions of leadership communication and effectiveness and employee engagement in the U.S. federal government sector. This study may help fill the gap in the literature by providing a deeper understanding of how government leadership influences employee engagement. Additionally, these findings may contribute to a better understanding of the impact of leadership influence and overall improved employee engagement in the federal government sector.

This chapter will include a review of the literature search strategy, a summary of the theoretical foundation, and a synthesis of the relevant literature. These sections will be followed by a summary of this chapter and transition into Chapter 3.

Literature Search Strategy

The following library databases and search engines were used to compile the relevant literature: ABI/INFORM Collection, Business Source Complete, Academic Search Complete, and the Thoreau Multi-Database Search. References were also pulled from government sources, such as the Merit Systems Protection Board and the Office of Personnel Management, and books on employee engagement. The scope of the study includes seminal research conducted in 1990 and recent peer-reviewed works through the current year. Most of the sources were taken from works published between 2015 and 2017. The following keyword search terms were used to explore the existing research literature: *Employee engagement, public sector, federal government, public service motivation, leadership, political involvement, political interest, and political activity.*

Theoretical Foundation

The theoretical framework of this study was informed by the existing theories within the field of employee engagement and motivation. For example, Kahn's employee engagement theory examines engagement from the perspective of the personal self and work performance roles. Kahn identified this concept as personal engagement. According to Kahn and Heaphy (2013; Truss et al., 2013), an employee's level of engagement can be influenced by the contextual and interpersonal (or relational) factors within the workplace. This theory emphasizes the importance of work relationships on the

completion of work tasks. These relationships shape how employees perform and engage in their work. As stated by Kahn (1990)

People become physically involved in tasks, ...cognitively vigilant, and empathically connected to others in the service of the work they are doing in ways that display what they think and feel, their creativity, their beliefs and values, and their personal connections to others. (p. 700)

In his study on engagement, Kahn found a positive relationship between personal engagement and psychological meaningfulness. Psychological meaningfulness is experienced when people feel that they are valued, that the work that they do makes a difference, and they are able to give back to their work and others in exchange for feelings of heightened physical, cognitive, or emotional energy. These findings indicated that people were personally engaged in situations or work that resulted in increased psychological meaningfulness.

Two qualitative studies were conducted using a grounded theory approach. Observations were taken in the context of a summer camp and an architecture firm. As an outside researcher, Kahn observed the phenomenon of personal engagement and disengagement. Based on the data obtained from interviews, Kahn compiled descriptions of the behaviors, experiences, and contextual factors depicting moments of personal engagement or disengagement. An independent coder was used, and there was a 97% interrater agreement. Descriptive statistics were also used to develop a conceptual framework, and correlations were calculated to determine interrater reliability. The results suggest strong interrater reliability ($r > .80$).

As related to psychological meaningfulness, the psychological contract theory outlines the cognitive process involved in the implicit exchange between employees and leaders within an organization. This exchange is one in which the employee contributes to the organization with the expectation that certain conditions will be met. Both the employer and the employee enter the agreement with certain expectations of work to be performed, rewards to be received, and outcomes to be achieved (Rousseau, 2011). An example of this contract would be employee commitment to the organization, or meeting established productivity quotas in exchange for pay, employee benefits, or recognition. The psychological contract is the implicit or perceived expectations concerning the employee-employer relationship concerning work obligations and compensation.

In their study on the relationship between psychological contract, organizational citizenship behavior, and organizational performance, Tsai and Lin (2014) drew from the psychological contract theory. Citing Argyris (1960), Levinson (1962), and Rousseau (1989), the researchers explained how employee recognition, mutual expectations, and employee perceptions of the organization's obligations enhance the organization-employee relationship. In exchange for recognition, expected benefits, and other positive outcomes, employees respond with increased productivity and organizational commitment. Based on the results of their study, a positive relationship exists between psychological contract, organizational citizenship behavior, and organizational performance (Tsai & Lin, 2014).

Eldor and Vigoda-Gadot (2017) examined how employee engagement contributes to the employee-organization relationship as compared to psychological empowerment

and the psychological contract. The authors proposed a framework in which, as the key mechanism, employee engagement explains the employee-organization relationship. As a result of their study, the authors found that employee engagement can be distinguished from psychological empowerment and the psychological contract in the way it contributes to mutual needs within the organization. The results indicated that a positive relationship exists between engagement and work centrality, which is the degree of importance that work has on the employee's life. This study also supported the idea that employee engagement is a unique concept distinguishable among other management concepts and should be further investigated for practical application (Eldor & Vigoda-Gadot, 2017).

The quantitative Eldor and Vigoda-Gadot (2017) study was conducted using a sample of 593 employees from various organizations in Israel. An online survey measuring employee engagement, psychological empowerment, psychological contract, work centrality, and demographics was used to collect the data. Confirmatory factor analysis and analysis of variance (ANOVA) tests were used to analyze the data, and the results suggest strong discriminant and predictive validity.

Bal et al., (2013) examined the relationship between the psychological contract, work engagement, and turnover intention. The authors hypothesized that engaged employees negotiate better psychological contracts with the organization due to their higher-level contributions. A total of 240 employees in a risk management organization in the Netherlands participated in this study. Several measures were used including a measure of employer obligations, employer fulfillment, employee contributions, work

engagement, and turnover intentions. Structural equation modeling was used to test the hypotheses.

Based on the reported results, a significant relationship exists between the fulfillment of the psychological contract, high levels of engagement, and low turnover intent. This relationship was statistically stronger for employees with low tenure as compared to high tenure employees. The practical implications for this study are that employers should strive to identify and fulfill the psychological contract expectations of employees early in their career. Fulfilling these expectations contributes to increased engagement, positive job attitudes, and low turnover. For more senior employees within the organization, employers should develop a strategy for maintaining and increasing engagement overtime (Bal et al., 2013).

Public Service Motivation Theory

As related to engagement and psychological meaningfulness, public service motivation describes an individual's drive to serve the public. These individuals are committed to public service and strive to make a positive impact on society through their work (Pandey et al., 2017; Bakker, 2015). Prior to them entering the public sector, outside factors such as parental influences, religious affiliation, professional memberships, and/or educational institutions can influence an individual's motivation to serve the public such as job characteristics, incentives, organizational culture, and human resource practices may enhance or increase their desire to serve (Gould-Williams, 2016).

Perry (1996) outlined six public service motives, to include attraction to public policy, commitment to public interest, social justice, civic duty, compassion, and self-

sacrifice. Perry (1996) sought to develop a measurement scale based on the public service motivation theory. To ensure construct validity, the scale was developed using conceptual dimensions identified in the literature review and a confirmatory factor analysis. The dimensions were attraction to public policy making, commitment to the public interest, compassion, and self-sacrifice. The items were developed based on the literature review and feedback obtained from a focus group. There were forty items total. According to Perry (1996), the Public Service Motivation Scale has good overall face and construct validity, discriminant validity, and high reliability.

Public service motivation has been positively correlated with organizational outcomes, to include job satisfaction, public sector job choice, employee performance, organizational performance, organizational commitment, and low employee turnover (Ritz et al., 2016). Employees who possess a high public service motivation are better able to manage the day-to-day job demands and work-related stressors because they have a willingness to sacrifice for the good of society and view their work as meaningful and significant in striving to help others (Bakker, 2015). According to Bakker (2015), more research is needed to understand the mechanism by which high public service motivation results in increased effort and performance and to understand the relationship between public service motivation and daily work engagement and the ability to manage daily job demands.

Literature Review

Engagement and Organizational Outcomes Employee Engagement

There has been a global effort and focus on employee engagement in order to enhance organizational performance and maintain a competitive advantage (Jha & Kumar, 2016). This is due to the fact that employee engagement has been linked to several organizational outcomes. Management practices which emphasize employee well-being or engagement have been correlated with increased productivity, job satisfaction, and overall financial performance (Jha & Kumar, 2016). Engaged employees exhibit higher levels of commitment to the organization and are more likely to provide quality customer service, which in turn influences customer engagement (Kumar & Pansari, 2016). The more engaged employees are, the better the customer service and resulting customer satisfaction, which is a high priority for many organizations (Jha & Kumar, 2016). In this descriptive study in which Jha and Kumar (2016) sought to understand the benefits of employee engagement. Primary data are collected using a survey of employee engagement and secondary data were retrieved from reports, journals, articles, and websites. Participants consisted of one hundred employees working in various organizations in New Delhi. Participant responses are presented by percentage for each item via pie charts and bar graphs. The reliability and validity of the study is not reported.

A significant relationship exists among employee engagement and “higher job performance ratings, increased in-role performance, organizational citizenship behaviors, personal initiative, higher likelihood of promotion, decreased absenteeism and tardiness,

and lower turnover and turnover intention” (Mackay et al., 2016, p. 2). To examine the incremental validity of employee engagement, Mackay et al. (2016) constructed a meta-analytic matrix of estimates. Steps were taken to establish creditability as outlined in the research methods; however, the researchers identified several limitations to the study, to include results based on cross-sectional research, inability to test the homogeneity assumption among studies included in the meta-analysis, and inability to establish overall model fit among the indices included in the meta-analysis. A positive relationship also exists between employee engagement and job satisfaction (Lu et al., 2016). In their study on the incremental validity of employee engagement, Mackay et al. (2016) found that engagement was a significant predictor of employee effectiveness.

As a result of competition, work pressures, and work-life imbalance, levels of employee engagement have decreased worldwide (Jha & Kumar, 2016). Among the regions, engagement scores have shown the most improvement in Europe and Latin America according to an Aon Hewitt report on global employee engagement (Jha & Kumar, 2016). As related to vigor, dedication, and absorption; supervisors displayed higher levels of engagement than line-level employees (Lu et al., 2016). Using a quantitative approach, Lu et al. (2016) ran a series of one-way analysis of covariance (ANCOVA) tests to measure supervisor versus line-level employee position differences on work engagement, job satisfaction, and turnover intentions. A hierarchical regression analysis procedure was utilized to test for the moderating effects of job position on work engagement, job satisfaction and turnover intentions. Participants included 859 line-level employees and supervisors from twenty-nine hotels managed by a North American

branded hotel management company. Study limitations include lack of generalizability due the homogeneous participant sample, common method bias as a result of self-reported responses and independent and dependent variables obtained from the same raters, and failure to account for individual differences such as personality may impact the credibility of the study. More research is needed in order to understand how organizations can address these variations of engagement.

Predicting Engagement

In discussing ways to enhance employee engagement, organizations should consider the factors that drive or predict employee engagement. Chandani et al. (2016) outlined a series of factors that predict employee engagement such as career development, effective talent management, leadership, and clarity of company values, policies a practice (see Appendix A). In an annual employee survey, the United States Office of Personnel Management (OPM) (2016) measured levels of employee engagement throughout the federal workforce. Within the Employee Engagement Index of the Federal Employee Viewpoint Survey (FEVS), OPM identified nine drivers of engagement of which “Performance Feedback, Collaborative/Cooperative Management, Merit System Principles, Employee Training & Development, and Work/Life Balance were [identified as] the top five key drivers” (p. 15). Additional drivers included: Job Resources; Performance Ratings; Performance Recognition and Reward; and Supportive Coworkers. The drivers identified in the FEVS are supported by and consistent with past research findings.

Political Influences and Engagement

There is a negative correlation between the perception of politics and employee engagement. The experience of a political work environment for employees contributed to strong negative employee emotions. As positive emotions have been associated with high levels of engagement, negative emotions associated with political work environments may influence levels of employee engagement (Chandani et al., 2016). Political work environments are commonly attributed to the organizational culture and employee attitudes within the workplace. The public sector is traditionally known for its bureaucratic culture, which can be highly political in terms of its top-down management approach.

Within the federal workplace, political engagement goes beyond the organizational culture and is specifically defined by federal regulation. A government employee's right to engage in political activity is limited and subject to government regulation (Azzaro, 2015). These individual citizens maintain their right to vote but may not engage in certain political activities as prohibited by the law. As regulated by the Hatch Act, government employees are prohibited from the following:

- Use their official authority or influence to interfere with an election.
- Solicit, accept or receive political contributions unless both individuals are members of the same Federal labor organization or employee organization and the one solicited is not a subordinate employee.
- Knowingly solicit or discourage the political activity of any person who has business before the agency.

- Engage in political activity while on duty.
- Engage in political activity in any government office.
- Engage in political activity while wearing an official uniform.
- Engage in political activity while using a government vehicle.
- Be candidates for public office in partisan elections.
- Wear political buttons on duty. (FDA, 2015)

With these restrictions, it may be worthwhile to explore the relationship between a government employee's general political engagement as related to those activities that are not prohibited by law (i.e., voting, political preferences, etc.) and employee engagement. Absent from participation in certain political activities are government employees more or less engaged in the political activities of their elected and appointed leaders and how this influence affects their level of engagement at work.

Engagement Responsibility

As there is a direct relationship between engagement and organizational outcomes, management should view engagement as having just as much importance as outcomes. Some organizations may believe that it is the responsibility of the Human Resources (HR) or Personnel function to promote employee engagement, as they are typically assigned the task of managing the personnel and staffing issues. This belief is contrary to research findings which provide evidence that there is an indirect relationship between HR practices and engagement. HR practices directly impact management behavior and person-job fit, and there is a correlation between these two variables (management behavior and person-job fit) and engagement (Chandani et al., 2016).

While HR practices play a role, it is the responsibility of leadership to supervise, manage, and lead its employees.

Popli and Rizvi (2017) examined the role of leadership style, employee engagement, and service orientation. Leadership styles included in this study were transformational, transactional, and passive avoidant, as measured by subordinate perceptions of leadership. Service orientation was defined as an interaction with customers characterized by behaviors such as cooperation, consideration, helpfulness, personal responsibility for work and exceeded work expectations. Participants included 329 employees across five service sector organizations in India. The results revealed that engaged employees had a higher service orientation than disengaged employees. Employee engagement mediated the relationship between leadership style and employee service orientation. In addition to leadership styles, a supportive organizational culture, feedback, trust, career advancement opportunities, effective and transparent human resource practices have been found to have a significant influence on employee engagement (Popli & Rizvi, 2017). A quantitative multi-cross-sectional descriptive design was utilized. Purposive sampling yielded a total of 329 participants from five organizations in Delhi. A 20-item employee engagement survey and the standardized multi-factor leadership questionnaire (MLQ) were reported as valid, reliable pre-existing measures. Multiple regression and mediation analysis were used to analyze the data. A limitation was common method bias – the collection of data on three variables using the same source of participants. In order to mitigate this limitation, the survey variables were counterbalanced.

All the various definitions, measures, and drivers of engagement may make it challenging for organizations to develop an effective engagement strategy. According to Saks (2017), the engagement strategy should be beyond focusing on engagement drivers and engagement scores at the organizational level. As engagement drives job performance, on the individual level, employee engagement should be integrated into the performance management process. Performance management is on-going and continuous, which is ideal in terms of incorporating an employee engagement strategy. Engagement should also be integrated into the entire human resource policy to include selection, socialization, performance management, and training and development (Saks, 2017). High-commitment human resource management practices such as high job security, promotion from within, continuous training, extensive benefits, and career development have also been positively correlated with increased employee engagement (Boon & Kalshoven, 2014).

Although leadership has been recognized as one of the most important drivers of employee engagement, in employee surveys of leadership, the quality of leadership and/or ratings of senior management often receive a low performance score (Kernaghan, 2011). According to Jha and Kumar (2016), “employees’ psychological well-being has been negatively affected due to lack of proper policy from management, lack of a good work environment, [and the] communication gap between the management and employees...” (p. 22). They urge organizations to develop a specific engagement plan to bolster engagement levels and increase employee confidence and enthusiasm to engage in

their work. Beyond the human resources policy and role in increasing employee engagement, management plays a critical role in this process.

In a 2012 study, the Center for Public Leadership canvassed the American public on their confidence in US leadership. Amongst other questions, participants were asked whether or not they believed that their country leaders were effective and do a good job. Several areas of leadership were assessed to include military, medical, nonprofit, local government, religious, supreme courts, Wall Street, business, Congress, executive branch, educational, and leadership within the news media. A total of 1013 US citizens were interviewed. Military and medical leadership were the only two sectors in which respondents reported above-average confidence. When surveyed, 69% of participants reported a belief that there is a leadership crisis in the US. Despite these findings, more than 80% of respondents still believed the nation's problems could be solved with effective leadership (Rosenthal, 2012).

Engagement is the responsibility of both leaders and employees within the organization. However, the relationship between management and employees could influence retention, as poor management could be the reason that some employees leave the organization. As senior leadership commits to employees and shows interest in employee input, employees will commit to senior leadership by displaying an increase in discretionary effort/engagement. Commitment from senior leadership could be displayed through compensation and benefits offered, as well as through orienting employees to the organizational mission and purpose. Training and continuous employee improvement can also increase an employee's level of engagement (Morris, 2016; Kim & Yoon, 2015).

As organizational managers seek to enhance employee engagement, senior leaders should consider revising their strategy towards engagement. An employee engagement strategy should be specific to the organization and should not be viewed as a one size fits all approach. In order to encourage participation effectively, engagement surveys should be confidential, simple, and short. Organizational culture should also be assessed to determine the workplace climate and openness to organizational change. The results of an engagement survey should be communicated to employees, to include an action plan on how management will address any issues identified (Morris, 2016).

Employee engagement is the responsibility of both employees and organizational leaders. According to Macauley (2015), “a leader has a significant amount of influence on a team member’s satisfaction, commitment, and engagement” (p. 299). Organizational leaders must ensure that every employee has a clear understanding of the mission of the organization. The work environment should be supportive of employee ideas and provide the support necessary for effective performance. Employees should feel safe from fear of retribution and should receive recognition or appreciation as a demonstration that management values their work. These are the factors that contribute to employee engagement.

Engagement in the Federal Workplace

As previously indicated, a key driver of engagement is an employee’s perception of organizational leadership in terms of overall commitment and management practice. Effective management significantly influences levels of employee engagement (Chandani et al., 2016).

In order to attract and retain quality talent, management must have both a participatory approach and the leadership qualities to meet the needs of its employees. Certain leadership attributes include respect, responsibility, a proactive approach, participatory involvement, sociability, and empathy towards employees (Jha & Kumar, 2016). Within senior levels of government leadership, it is important to convey these attributes to the federal workforce. Employee perceptions of these leadership attributes will be based on the policies and decision-making implemented by their elected and appointed senior leaders. In a systematic review of past literature on employee engagement in the public sector, to further understand the findings on engagement and organizational outcomes, researchers expressed a need for continued research on all aspects of engagement in the public sector (Bailey et al., 2015).

Two types of leadership exist within the government sector, political and administrative. Political leaders maintain the political agenda or values of the president. Administrative leaders are program managers who implement policy. Ugaddan and Park (2017) examined the quality of political and administrative leadership and its effect on employee engagement and public service motivation. Using the social exchange theory as a foundation, Ugaddan and Park (2017) proposed that public service motivation mediates the relationship between quality of leadership and employee engagement. Based on the social exchange theory, employees' perception of leadership competence results in reciprocation of competent behaviors, such as communication, respect, and dedication to the accomplishment of the organizational mission. The leader-member exchange theory

also supports this hypothesis in that when leader-member exchange is high, employees exhibit extra effort in their job performance.

When employees have an untrustworthy perception of their organizational leaders, it may cause them to be distracted from their work. The use of secondary data from the 2010 US Merit System and Protection Board Merit Principles Survey resulted in over 13,000 responses. Quality of leadership was measured based on management skills, commitment to achieve the agency mission, communication skills, respect, and working relationship with senior career executives. A significant relationship was found among quality of political and administrative leadership, public service motivation, and employee engagement, with public service motivation acting as a mediator.

This study by Ugaddan and Park (2017) is one of few that addressed employee engagement and leadership in the public sector. It informs the current study in that it describes the overall relationship between quality of political and administrative leadership, public service motivation, and employee engagement. However, it did not adequately address the influence of trust in senior leadership and/or political involvement and their effect on employee engagement. More research is needed to examine how these variables impact engagement and public service motivation.

Public Service Motivation

Organizational leaders should consider many factors in terms of increasing employee engagement in the public sector. As public organizations face issues with funding and decreased budgets, motivating employees becomes an increasing challenge in terms of developing alternatives to monetary awards. In their theoretical model, Agata

and Bogna (2015) outlined a series of propositions concerning the relationship between organizational culture, organizational commitment, and public service motivation. Agata and Bogna (2015) proposed a mutual relationship between public service motivation and organizational culture. They also proposed that organizational culture moderates the influence of public service motivation on organizational commitment. Agata and Bogna argued that a deeper understanding of this relationship would help enhance organizational commitment and improve recruiting strategies within public service organizations. Agata and Bogna developed a theoretical model based on three organizational constructs: public service motivation and organizational commitment at the individual level and organizational culture at the organizational level. Multilevel research was conducted to explore the relationship between these variables. In this article, Agata and Bogna presented a research proposal and developed three hypotheses based on past research (2015).

According to De Simone et al. (2016), public service organizations are at a higher risk level for work-related stress than other organizational settings. According to their research findings, engaged employees are more resistant to stress (De Simone et al., 2016). De Simone et al. (2016) examined the relationships among work-related stress, public service motivation, work engagement, job satisfaction, and life satisfaction. The study included 137 participants from a public organization in southern Italy. The results suggest a positive correlation between the public service motivation, job satisfaction, and engagement. A positive correlation was also found between and among engagement, job satisfaction, and low-risk work-related stress. Survey questionnaires were distributed to

137 public sector inspector employees in an organization in Italy. Several instruments were used to include the HSEs Management Standards Indicator Tool to measure sources of stress at work, a measure of public service motivation, job satisfaction, life satisfaction, and the Utrecht Work Engagement Scale. Exploratory factor analyses and analyses of variance were used to analyze the data. The significant findings were reported. A secondary study was conducted in which sixty-one participants split into five focus groups were interviewed to investigate the specific stressors that characterize the work of judicial police officers among the inspectors. De Simone et al. indicated that although the study was based on a specific context of public administration, the results may still be generalizable to other settings.

Predictors

In a study conducted to explore the deep antecedents of public service motivation, 191 participants were asked to describe their childhood experiences and their current public service motivation (Charbonneau & Van Ryzin, 2017). Stepwise regression analyses were used to analyze the data. While participant gender, age, and race did not explain the variance in overall public service motivation; political views of parents were significantly related to overall public service motivation. Growing up in a conservative household resulted in lower public service motivation. Participants who reported growing up in religious households reported higher levels of overall public service motivation. Despite the hypothesis, growing up with a parent serving in the military was negatively correlated with overall public service motivation.

Relatedly, childhood experiences influence public service motivation, and public service motivation influences job choice. In a longitudinal study on public service motivation and job choice, Wright et al. (2017) surveyed two hundred students to assess their public service motivation. A follow-up study was conducted four years after the initial survey to assess job choice. The results indicated that students with higher public service motivation in the initial study were more likely to work in public service jobs after graduation. However, in a survey of 477 government employees and data from employee personnel records, Wright et al. (2017) did not find evidence linking public service motivation to absenteeism or performance.

Individuals with high public service motivation may be attracted to specific types of work (Wright et al., 2017). Public service motivation describes an individual's desire to serve the public. Many public agencies have missions geared towards improving social problems. "Since public agencies have social-oriented missions, proponents of PSM theory have argued that individuals with high PSM are more likely to view public agency missions as important because their goals and values overlap with those of agencies" (Wright et al. 2012, p. 207). Individuals with high public service motivation are more likely to be attracted to the mission of public organizations.

Mission valence describes an individual's attraction to the agency's mission. Caillier (2015) conducted a study on public service motivation, mission valence, and extra-role behaviors. The results of the study suggested that mission valence mediates the relationship between public service motivation and job satisfaction and partially mediates the relationship between public service motivation and extra-role behaviors. Extra-role

behaviors occur when employees perform tasks beyond what is required by the job, such as making suggestions to improve their organization or putting forth extra effort to ensure the success of the organization. The researchers used the SurveyMonkey database and questionnaires were distributed to local, state, and federal government employees in the United States. A total of 913 surveys were returned. Measures included public service motivation, mission valance, job satisfaction, turnover intention, and extra-role behaviors. The Cronbach's alpha levels, ranging between $\alpha = 0.78$ and 0.89 , indicated that the scales used were reliable. Caillier also reported that based on a confirmatory factor analysis, discriminant and convergent validity was upheld. Several study limitations are noted: (a) due to a higher sample of men and non-minority participants, the sample may not be representative of the federal government sector; (b) due to the use of a cross-sectional design, causality could not be determined; (c) omitted variable bias may have resulted from the fact that the theoretical model tested did not include a comprehensive set of factors; and (d) results and conclusions were based on a single source, employee perceptions.

Measures

As with engagement, multiple instruments have been developed to measure public service motivation. Kim (2017) examined two different measures of public service motivation to determine whether the measures can be used interchangeably. The first measure is a multidimensional measure consisting of four dimensions (16-items). The second is unidimensional (5-items). Kim (2017) compared the explanatory power of each measure and found that there was no significant difference between the two measures in

terms of predicting work attitudes including job satisfaction, affective commitment, and person-organizational fit. The sample consisted of 426 civil servants throughout four national assembly of Korea support organizations. A series of multiple regression analyses was conducted to test the hypothesis (see Appendix B). The results of this study may support future comparison and generalization across studies using these two types of measures.

As a result of the Kim (2017) comparative study, the findings revealed commitment to public values as a predictor of job satisfaction and person-organization fit. Attraction to public service was shown to have a significant influence on organizational commitment and a significant relationship between self-sacrifice and all three work attitudes.

In a bibliometric network analysis, Homberg and Vogel (2016) sought to identify a linkage between academic research in the field of human resource management (HRM) and public service motivation (PSM). PSM has been characterized by key variables, such as attraction to policymaking, commitment to the public interest/civic duty, compassion, and self-sacrifice. Although PSM is primarily highlighted in the public sector, it may also correlate with two concepts studied in the private sector: corporate social responsibility and organizational citizenship behavior.

Based on the findings of the analysis, it was found that seven core subject areas make up the research on public service motivation. These subjects are public sector, organizational psychology, general psychology, HRM, general management, organization studies and social sciences - with the public sector journals containing the core of the

published articles. Also, based on a meta-analysis of past research and as related to HRM, the researchers found that a positive relationship exists between intrinsic HRM practices (such as job enrichment, participation in decision-making, performance appraisal, and professional development) and PSM (Homburg & Vogel, 2016).

Leadership

As with engagement, leadership may also influence an employee's attraction to public service. Tuan (2016) examined the relationship between servant leadership and knowledge sharing and the mediating role of public service motivation/ moderating role of corporate social responsibility. Tuan (2016) cited the social exchange and social learning theories to support the hypothesis concerning servant leadership, knowledge sharing, and public service motivation. It was hypothesized that influenced by servant leadership, public service motivation drives employees to engage in knowledge sharing. Hierarchical multiple regression analysis was used to analyze the data. The results of the study supported the hypothesis. PSM was found to mediate the relationship between servant leadership and knowledge sharing, while corporate social responsibility had a moderating effect.

Given that effective leadership does play a role, enhancing PSM may be a strategy for managers to consider in terms of increasing employee commitment, and it was seen to moderate the relationship between transformational leadership and organizational citizenship behaviors within the public sector (Bottomley et al., 2016). Employees with high public service motivation were less motivated by the effects of transformational leadership when engaging in organizational citizenship behaviors. Employees with lower

public service motivation were more motivated by the effects of transformational leadership when engaging in organizational citizenship behaviors. Based on these findings, the goals of employees with high public service motivation are aligned with organizational goals and thus engage in organizational citizenship behaviors and may not require additional motivation from leadership. While leadership may not be as influential in terms of public service motivation and organizational citizenship behaviors, research has shown that leadership has a significant influence on both employee engagement and public service motivation (Bottomley et al., 2016). Survey questionnaires were distributed to civil servant employees in the Guadalajara Metropolitan Area in Mexico and of those distributed, 1016 surveys were received. Transformational leadership was measured using the Multi-factor Leadership Questionnaire, an abridged version of Perry's (1996) Public Service Motivation Scale, and eight items from Lee and Allen's (2002) measure of organizational citizenship behaviors. Based on confirmatory factor analysis, the scales used were reported as reliable and valid measures. A replication study involving private sector employees in Mexico was also conducted two years after the initial study. The following limitations were reported: (a) due to the cross-sectional design, causality could not be determined; (b) common method bias may have occurred due to the use of a single source of data to measure multiple variables; and (c) the sample used may not be generalizable to other settings or geographical areas.

As a part of the human resource practices, management should seek ways to invest in employee well-being as a way to enhance public service motivation (Gould-Williams, 2016). Gould-Williams (2016) argued that if management does not strive to

satisfy their employees' basic psychological needs, motivation to serve the public may diminish. And given that disengaged employees do not exert the effort and attention necessary for optimal performance, they will likely do the minimum required to complete their work tasks. Using the results of a government-wide survey of federal employees, Marrelli (2011) compared the perceptions of nonsupervisory employees in the four federal agencies with the highest percentage of engaged employees with the perceptions of employees in the four agencies with the lowest percentages of engaged employees. In her study on employee engagement and performance management in the federal sector, Marrelli (2011) found that intrinsic sources of motivation, such as conscientiousness, interest in work, centrality of work and personal life, and satisfaction derived from work, can contribute to engagement. External drivers such as organizational support, a compelling mission, trusted leadership, efficient work processes, and effective performance management can also contribute to an employee's engagement in the workplace. Both internal and external factors are necessary to establish and maintain engagement. More empirical research is needed to determine the reliability of these findings.

Many organizational stakeholders identify leadership as critical to organizational success (Dias Semedo et al., 2016). Authentic leadership is characterized by the leader's moral character, concern for others, and ethical values captured by their actions (Shahid, 2010 as cited by Dias Semedo et al., 2016). In their study, Dias Semedo et al. (2016) examined the relationship between authentic leadership and employee attitudes and behaviors. They specifically focused on the affective commitment, job resourcefulness,

and creativity of employees. A total of 543 employees from organizations throughout Cape Verdean participated in the study. Based on the results of their study, a positive relationship exists between authentic leadership and employee attitudes and behaviors. They found that affective commitment and job resourcefulness predicted employee creativity and that job resourcefulness and creativity predicted employee performance.

Leadership style and management strategy both contribute to the level of employee engagement. Engagement is high during the initial onset of employment, then decreases dramatically over time (Marrelli 2011). Positive management practices that also contribute to high levels of employee engagement include open communication, employee involvement in decision-making, objective performance measures, positive feedback, and performance-based recognition. Evidence has shown that frequent, open, and honest communication is critical towards generating trust between management and its employees and contributes to high performance (Marrelli, 2011). In order to create an environment of trust in terms of engagement, organizational leaders should encourage open discussions and sharing of opinions and acknowledge this behavior with positive responses. Employees will feel a sense of connection with their leaders once trust has been established. Employees were more likely to respect their leaders as well as believe that leaders generate motivation and commitment when the leaders invest more time and efforts towards communication. First line supervisors can help employees establish the link between the work that they do and the achievement of organizational goals and mission (Marrelli, 2011; U.S. Merit Systems Protection Board, 2009).

Summary and Conclusions

Developing a workforce that is engaged, innovative, and productive is a top priority for federal government senior leaders (U.S. Office of Personnel Management, 2016). Management practices which emphasize employee well-being or engagement have been correlated with increased productivity, job satisfaction, and overall financial performance (Jha & Kumar, 2016). The more engaged employees are, the better the customer service and resulting customer satisfaction, which is a high priority for many organizations (Jha & Kumar, 2016). Although leadership has been recognized as one of the most important drivers of employee engagement, in employee surveys of leadership, the quality of leadership and/or ratings of senior management often receive a low performance score (Kernaghan, 2011). According to Jha and Kumar (2016), “employees’ psychological well-being has been negatively affected due to lack of proper policy from management, lack of a good work environment, [and the] communication gap between the management and employees...” (p. 22).

While levels of engagement have slightly increased, employee engagement in the federal sector is still significantly lagging as compared to those in the private sector (62%, 77%, McCarthy et al., 2020; Partnership for Public Service, 2019). When asked if organizational leaders generate high levels of motivation and commitment in the workforce, only 48% of employees indicated a positive response (U.S. Office of Personnel Management, 2022). Among survey categories, effective leadership was among the lowest, as rated in the 2016 Federal Employee Viewpoint Survey (Partnership for Public Service & Deloitte, 2016). While there has been extensive research on

leadership and engagement in the private sector, more research is needed to understand the relationship between employee engagement and aspects of leadership in the federal sector.

The purpose of this quantitative correlation study was to determine to what extent, if any, there is a relationship between perceptions of leadership communication and effectiveness and employee engagement in the US federal government sector. While past research has focused on leadership and engagement in the private sector, the purpose of the current study was to examine the relationship between perceptions of leadership communication and effectiveness and employee engagement in the US federal government sector. This study may help fill the gap in the literature by providing a deeper understanding of how government leadership influences employee engagement. The findings may contribute to a better understanding of the impact of leadership influence and overall improved employee engagement in the federal government sector.

Chapter 2 included a description of the literature search strategy and theoretical foundation. A synthesis of the current literature describing related studies and findings was also presented in this chapter. Chapter 3 will consist of a description of the research design, variables, and research methodology. The population, sampling procedures, and data collection procedures will also be presented in Chapter 3.

Chapter 3: Research Method

The purpose of this quantitative correlation study and primary research question was to determine to what extent, if any, does a relationship exist between perceptions of leadership communication and effectiveness and employee engagement in the U.S. federal government sector. While past research has focused on engagement and leadership in the private sector, the purpose of the current study was to examine the relationship between perceptions of leadership communication and effectiveness and employee engagement within the U.S. federal government sector. This study may help contribute to filling the literature gap by providing a deeper understanding of how government leadership influences employee engagement. These findings may contribute to a better understanding of the impact of leadership influence and overall improved employee engagement in the US federal government sector.

This chapter includes a description of the research design and rationale, the research methodology, and the population and sampling procedures. This chapter also includes procedures for recruitment, participation, and data collection; instrumentation and operationalization of constructs; data analysis plan; threats to validity; and ethical procedures.

Research Design and Rationale

Qualitative, quantitative, and mixed methods are three research traditions used to analyze phenomena within the social sciences (Creswell, 2014; Park & Park, 2016). Specifically, these methods are used to understand, predict, and/or control social phenomena (Park & Park, 2016). Based on the purpose of the study, a quantitative

research method was an appropriate approach for addressing the research problem and questions. A quantitative research method allows the researcher to explore the relationship between two or more variables, as is proposed for this study, and to test a specific hypothesis concerning their relationship. Quantitative research is used to predict and/or control phenomena. As such, quantitative research methods are used to measure, evaluate, and generalize findings of a sample to a population. Quantitative methods focus on numerical data and measurable variables, while qualitative methods involve observation and interpretation (Park & Park, 2016).

A qualitative research method was not suitable for this study because the goal of qualitative research is to study a phenomenon or the lived experiences of participants in their natural setting (Arghode, 2012; Park & Park, 2016). In mixed methods research, both qualitative and quantitative data are integrated to collect multiple forms of data (Creswell, 2014). The quantitative approach was most suitable to address the research problem and research questions for this study to determine a relationship among variables.

Within the quantitative tradition, the non-experimental correlational research design was used to explore the relationship between the independent and dependent variables. A correlational design was most appropriate for this research study because it utilizes survey research in which participants respond to a set of questions about their perceptions of leadership and employee engagement. Rather than seeking a causal relationship, the goal of this research design was to allow me as the researcher to identify patterns and describe the relationship between variables (Frankfort-Nachmias &

Nachmias, 2008). An experimental design differs from a survey design in that it requires experimental and controlled conditions and random assignment for the purposes are identifying cause and effect (Park & Park, 2016). An experimental design was not appropriate in addressing the research question.

Surveys can be useful for studying large populations and may also assist in the generalization of results. Further, a quantitative method using survey research may be cost-effective, requiring little time and resources to implement. Disadvantages in using surveys, specifically an online survey, are low response rate and lack of engagement between the researcher and the participants (Leggett, 2017). These disadvantages can be minimized by ensuring that the survey length and time for completion are reasonable, as well as ensuring that the survey instructions and survey questions are clear and concise. This design choice is consistent with research designs needed to advance knowledge in the discipline because a survey design allows the researcher to describe trends, attitudes, or opinions of a population as inferred by the population sample (Creswell, 2014; Park & Park, 2016). Similar studies and previous research, as related to the independent and dependent variables, have utilized the survey design (Bal et al., 2013; Eldor & Vigoda-Gadot, 2017; Popli & Rizvi, 2017).

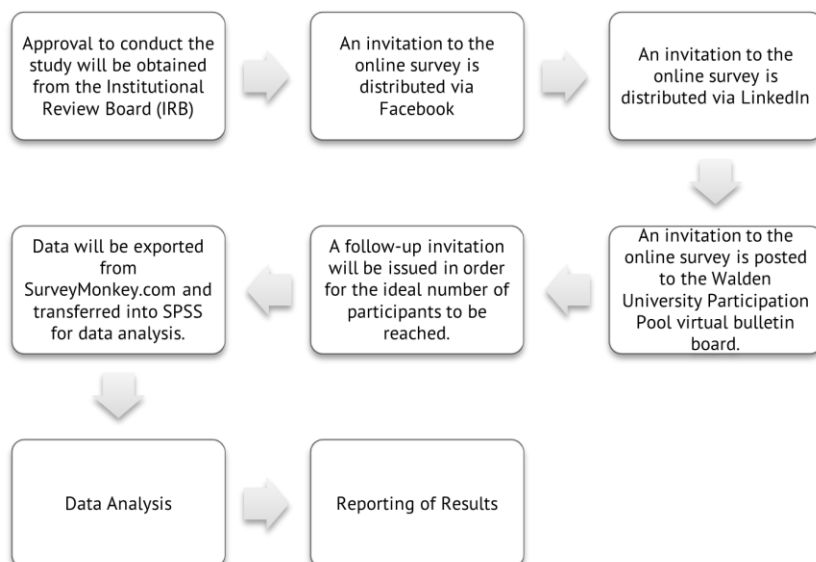
Methodology

After Institutional Review Board (IRB) approval was obtained, an invitation to the online survey was distributed via Facebook to federal employee social media groups such as the Federal HR Peeps and Federal HR Professionals Facebook groups. A link to the online survey was also shared publicly on Facebook so that participants could share it

with others (See Appendix C). To recruit more participants, Centiment Audience Panel was employed, which allows researchers to obtain survey responses from a target audience. Specifically, the Centiment Audience Panel tool finds survey panelists who meet the participant criteria. Volunteer survey participants received an email invitation from Survey Monkey to take the online survey. The survey link was also shared on LinkedIn. Using the nonprobability snowball sampling technique, participants were asked to share the survey link with their acquaintances. Snowball sampling is a convenience sampling method that is used when it is difficult to access participants with target characteristics (Naderifar et al., 2017). An invitation to the online survey was also posted to the Walden University Participation Pool virtual bulletin board. Follow-up invitations were issued for the ideal number of participants to be reached. The research methodology, as depicted in Figure 1, will be detailed in the sections that follow.

Figure 1

Research Process



Population

The general population is U.S. Federal Government civilian employees. Federal jobs are found within the executive, legislative, and judicial branches of the US government (Johnson, 2018). The civil service is comprised of the permanent professional branches of a government's administration, excluding military and judicial branches and elected politicians (Sherman, 2018). According to the Office of Personnel Management, the U.S. government is comprised of over two million civilian employees (Jennings & Nagel, 2018; Willhide, 2014), not including the US Postal Service (Governing, 2018). The target population for this study will be permanent, non-supervisory US Federal Government civilian employees. U.S. military personnel and government contract workers are not included in this population, as they are not considered civilian employees/civil service employees (Jennings & Nagel, 2018; Johnson, 2018). The sample was drawn from within this target population.

Sampling and Sampling Procedures

Nonprobability sampling, a subjective method used to determine what components should be included in the sample, was employed in this study (Lavrakas, 2008). Since the onset of the COVID-19 pandemic, federal agencies have worked to expand telework and remote flexibilities for federal employees (SHRM, 2021). With more employees working from home, it can be more challenging to recruit and gain access to potential participants through traditional sampling methods. Snowball sampling is a nonprobability convenience sampling method used to recruit participants that are not easily accessible or who are difficult to easily identify (Leighton et al., 2021; Ungvarsky,

2020). Snowball sampling has been used in both qualitative and quantitative research to overcome barriers to accessibility as participants are invited to share the survey invitation with people they know who meet the research criteria (Leighton et al., 2021). Snowball sampling has also been referred to as chain or referral sampling because people who have already taken the survey are asked to recommend others to participate as well (Ungvarsky, 2020). In one research study, “researchers used snowball...sampling by initially connecting with professionals or groups on social media platforms (e.g., LinkedIn and Facebook...groups) that most closely aligned with the target population” (Leighton et al., 2021, p. 38). Potential participants were initially identified by locating social media sites that catered to a particular group or population. The survey link was then shared on these sites, and end users were asked to take the survey and share the research opportunity with others in order to reach more potential participants. The survey link was shared and re-shared until the desired number of participants was reached (Leighton et al., 2021). The target population for this study was permanent, non-supervisory US Federal Government civilian employees. Eligible participants must have met these criteria.

An adequate sample size can increase the chances of finding a statistically significant relationship as related to the research variables and rejecting the null hypothesis. The purpose of calculating sample size is to ensure a broad enough sample of the target population is surveyed to achieve generalizability and accuracy of results, while also maintaining a narrow enough sample practical regarding available resources assessable to answer the research question (Peat, 2002). In addition to sample size, *power*

is a research term used to define the likelihood of finding a statistically significant difference in the results (Peat, 2002). According to Field (2013), power can be computed using the formula $1 - \beta$. The β -level indicates the Type II error rate. Using $\alpha = .05$, $\beta = .8$, and data from past research, this formula can be used to estimate the effect size and determine how many participants would be needed to achieve 80% power. A Type II error occurs when a significant difference between variables is not reached due to small sample size (Peat, 2002). Using power to calculate the necessary sample size can be done using a computer software program such as *G*Power*. Using *G*Power*, the linear multiple regression test was selected to conduct an a priori power analysis. Using a medium effect size and five predictors, a sample size of at least 139 was required to achieve 80% power.

Procedures for Recruitment, Participation, and Data Collection (Primary Data)

A link to the online survey, via SurveyMonkey.com, was distributed via social media groups such as the *Federal HR Peeps* Facebook group. The invitation and link to the survey was also posted via Facebook and LinkedIn platforms to solicit the participation of federal civilian employees. An invitation to the online survey was also posted to the Walden University Participation Pool virtual bulletin board. After the minimum sample size was met, the survey was closed, all responses will remain confidential, and no follow-up or further contact will be necessary. The informed consent document (ICD) appeared as the first page of the online survey once participants followed the link from social media. The ICD document included a purpose statement, detailed instructions, and expectations of the study. Demographic information, such as

agency, tenure/length of service, grade level, career level/supervisory status, job series, gender, race and ethnicity, age, and duty location was collected (See Appendix D).

Participants were then asked to complete the 24-item Public Service Motivation Scale, the 20-item Trust in Leaders Instrument, the Utrecht Work Engagement Scale (UWES) 9-Version, and the Organizational Vision and Leadership Survey (19 items). It was projected that the survey would take no more than 20 to 30 minutes to complete. Data was downloaded from SurveyMonkey.com, exported into an excel spreadsheet, and analyzed using Statistical Package for Social Sciences (SPSS).

Instrumentation and Operationalization of Constructs

The following measures were utilized and were retrieved from the PsycTESTS database (See Appendix E):

The 24-item Public Service Motivation Scale measures public service motivation on a 5-point Likert scale with responses ranging from agree to disagree. According to Perry (1996), the scale has good overall face and construct validity, discriminant validity, and high reliability (Coefficient Alpha = .90). This scale can be obtained from the APA PsycTest Database and may be used for the purpose of research/teaching with no fee.

The 20-item Trust in Leaders Instrument assesses an employee's cognitive and affective trust in management and cognitive and affective trust in supervisor. Responses are measured using a five-point response format, ranging from strongly disagree to strongly agree. According to Yang and Mossholder (2010), the scale demonstrated acceptable reliability as assessed by the individual sub-scales: Cognitive trust in management ($\alpha = .95$), affective trust in management ($\alpha = .94$), cognitive trust in

supervisor ($\alpha = .94$), and affective trust in supervisor ($\alpha = .95$). This scale can be obtained from the APA PsycTest Database and may be used for the purpose of research/teaching with no fee.

The Utrecht Work Engagement Scale (UWES)-9 Version consists of nine items and utilizes a 7-point frequency rating scale ranging from never to always/every day. When used in a previous study, this scale was adapted from the Dutch version of the UWES scale. The factorial validity of the shortened version of the scale was tested using a confirmatory factor analysis and found to have good internal consistency and test-retest reliability (Schaufeli et al., 2006; Breevaart et al., 2012). This scale can be obtained from the APA PsycTest Database and may be used for the purpose of research/teaching at no cost.

In addition to the instruments listed above, the Organizational Vision and Leadership Survey was utilized. This survey was adopted from Baldrige Criteria for Performance Excellence (2006) and includes nineteen items to measure organizational vision and leadership. Five aspects of leadership are measured: Vision, Visibility, Change, Understanding Quality, and Communication. Cronbach's alpha values ranged from .751 to .839 with reported high inter-item correlations (Schmidt & Akdere, 2007). Permission was obtained from Dr. Steven W. Schmidt of East Carolina University to use this instrument for research purposes (See Appendix F).

Table 1*Alignment between Instruments and Variables*

Instrument Used	Variable Measured
The 24-item Public Service Motivation Scale	Public Service Motivation
The 20-item Trust in Leaders Instrument	Trust in Leadership
The Utrecht Work Engagement Scale (UWES) -9 Version	Employee Engagement
Organizational Vision and Leadership Survey (19 items)	Employee Perceptions of Leadership Communication and effectiveness

Reverse Coding

Nine of the items in the 24-item Public Service Motivation scale were negatively worded and fifteen of the items were positively worded. In order to ensure that all questions were phrased in the same direction for statistical analysis, the following questions were reverse coded prior to calculating the overall score:

Table 2*Reverse Coded Items from 24-item Public Service Motivation Scale*

Score	Items
73	I don't care much for politicians.
79	The give and take of public policy making doesn't appeal to me.
82	I have little compassion for people in need who are unwilling to take the first step to help themselves.
84	There are few public programs that I wholeheartedly support.
85	Politics is a dirty word.
86	I seldom think about the welfare of people I don't know personally.
87	Doing well financially is definitely more important to me than doing good deeds.
88	It is hard for me to get intensely interested in what is going on in my community.
97	I am rarely moved by the plight of the underprivileged.

Table 3

Reverse Coded Scale from 24-item Public Service Motivation Scale

Old Scale	New Scale
1 Strongly Disagree	7 Strongly Disagree
2 Disagree	6 Disagree
3 Somewhat Disagree	5 Somewhat Disagree
4 Neither Disagree or Agree	4 Neither Disagree or Agree
5 Somewhat Agree	3 Somewhat Agree
6 Agree	2 Agree
7 Strongly Agree	1 Strongly Agree

Data Analysis Plan

Research Question and Hypotheses

In order to determine to what extent, if any, a relationship exist between perceptions of leadership communication and effectiveness and employee engagement in the U.S. federal government sector., the following research questions and hypotheses were proposed:

RQ1: To what extent, if any, does a relationship exist between employee perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government?

H₀: There is no significant relationship between perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government.

H_a: There is a significant relationship between perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government.

RQ2: To what extent, if any, does a relationship exist between trust in leadership and employee engagement in the U.S. Federal Government?

H₀: There is no significant relationship between trust in leadership and employee engagement in the U.S. Federal Government.

H_a: There is a significant relationship between trust in leadership and employee engagement in the U.S. Federal Government.

RQ3: To what extent, if any, does a relationship exist between public service motivation and employee engagement in the U.S. Federal Government?

H₀: There is no significant relationship between public service motivation and employee engagement in the U.S. Federal Government.

H_a: There is a significant relationship between public service motivation and employee engagement in the U.S. Federal Government.

Data was collected using and downloaded from SurveyMonkey. SPSS statistical data analysis software was used to analyze the data. A linear regression analysis was conducted to test the hypotheses. The independent variables are employee perceptions of leadership communication and effectiveness, trust in leadership, and public service motivation. The dependent variable was employee engagement.

It is established in the literature that employee engagement is highest during the initial onset of employment and decreases dramatically over time (Marrelli, 2011). Moreover, senior management employees are significantly more engaged than employees at lower job levels (Martins, 2016 as cited by Martins, 2017). To account for these findings, the control variables were employee tenure and supervisory status.

The measures of central tendency (i.e., mean, median, and mode) and measures of dispersion (i.e., standard deviation) are best suited for this study and are the measures that were used to describe the sample characteristics and the study variables. The distribution of the data was assessed statistically to meet the assumptions for using parametric tests, in this case multiple regression, via assumptions testing such as (residual v fitted value plot, Durbin Watson (DW) statistic, and scatter plots) to determine if the assumptions of normality, linearity, and homoscedasticity were met. If these assumptions were not met, alternate methods such as the use of non-parametric tests would be employed. The results were interpreted using the confidence interval estimate (CI) with a 95% desired level of confidence.

Threats to Validity

There are two types of threats to validity categorized as either internal or external. External threats to validity occur when the unique characteristics of the sample do not allow for generalizations to other populations. Threats to external validity such as interaction of selection and sample, interaction of setting and treatment, and interaction of history and treatment, could be addressed via replication of the current study to determine if the same results are achieved using a different group of participants, a different setting, and a different period in time (Creswell, 2014).

Internal threats to validity are the procedures or methods that threaten the researcher's ability to infer accurate conclusions from the data collected. Threats to internal validity such as history, maturation, regression, selection, mortality, diffusion of treatment, compensatory demoralization/rivalry, testing, and instrumentation would not

impact this study because there are no experimental groups and no pre-/post-tests (Creswell, 2014). History becomes a threat to validity when participants are influenced by experiences that occur during the course of an experiment. According to Flannelly et al. (2018), history may not be a threat to validity if an experiment takes only a few minutes or a few hours. Similar to history, maturation becomes a threat to validity when biological changes such as age or awareness change over time. Many of these threats are related to experimental and control groups and therefore, are not a threat to the current study.

Construct Validity

Validity is the question of whether the measurement used is measuring what it was intended to measure. Concerning validity of measurement, content validity refers to whether the measurement instrument adequately reflects the concept being measured. Types of content validity include face validity and sampling validity. Face validity is a subjective evaluation of how well the questions capture the variable or concept being studied. Sampling validity is concerned with whether the population of the study has been adequately sampled. Empirical validity is “concerned with the relationship between a measurement instrument and the measured outcomes” (Frankfort-Nachmias & Nachmias, 2008, p. 150). This means that the results or scores produced actually represent the variable being measured. Construct validity examines the relationship and congruency between the measurement instrument and the theoretical framework and assumptions employed in the study (Frankfort-Nachmias & Nachmias, 2008). The purpose of this quantitative correlation study was to determine to what extent, if any, does a relationship

exist between employee engagement and perceptions of leadership communication and effectiveness within the US federal government sector. Based on the instruments that were utilized to examine the variables, high research validity should be achieved.

Ethical Procedures

Approval to conduct the study was obtained from the IRB. All participants consented to the terms in the ICD with the option to participate or not participate in the study. All responses remained anonymous and no identifying information was collected. There were minimal to no risk associated with participation in the survey if participants complete the study in a private setting. Participation was voluntary, and no awards or incentives were given for completion of the survey. There was no retaliation for not choosing to participate. The survey was only accessed online to main anonymity and consistency within the study. The ethical intent was clearly outlined in the ICD.

The data will be stored on a password-protected computer and a password-protected portable hard drive. The data will be erased from the computer once the research is complete and will be destroyed from the hard drive five years after completion of the research. The identity of the participants to survey responses will remain confidential and will not be revealed during or after the data collection or data analysis process.

Summary

The purpose of this quantitative correlation study was to investigate the relationship between employee engagement and perceptions of leadership communication and effectiveness within the US federal government sector. The independent variables are

employee perceptions of leadership communication and effectiveness, trust in leadership, and public service motivation. The dependent variable is employee engagement. The theoretical framework of this study is informed by the existing theories within the field of employee engagement, Professor William A. Kahn's (1990) theory of personal engagement and motivation, the public service motivation theory (Perry, 1996).

A correlation research design will be used to explore the relationship between the independent and dependent variable. A correlation design is most appropriate for this research study in that it utilizes survey research in which participants respond to a set of questions about their perceptions of leadership communication and effectiveness and employee engagement. The target population for this study is permanent, non-supervisory US Federal Government civilian employees. To ensure ethics in research and protect the participants in this study, approval to conduct the study was obtained from the IRB. All participants received an informed consent and responses will remain confidential.

A link to the online survey, via SurveyMonkey.com, was distributed via Facebook and LinkedIn to solicit the participation of federal employees worldwide. An invitation to the online survey was also posted to the Walden University Participation Pool virtual bulletin board. The survey included a purpose statement, informed consent, detailed instructions, and expectations of the study. Demographic information such as agency, tenure/length of service, grade level, career level/supervisory status, job series, gender, ethnicity, age, and duty location was collected (See Appendix D). A linear regression analysis was conducted using the Statistical Package for Social Sciences (SPSS) to test

the research hypotheses. In Chapter 4, I outline the data collection process and provide a detailed summary of the results of this study.

Chapter 4: Results

The general problem addressed in this study is that public sector employees experience unique leadership challenges including frequently changing political leadership, hard-to-measure performance goals, bureaucratic decision-making, influential power of multiple external stakeholders, strict employment rules and regulations, budget constraints, and high visibility of government actions (Lavigna, 2013). These same factors may also affect levels of engagement for federal government employees (Lavigna, 2013). While levels of engagement have slightly increased in the federal sector, employee engagement in the U.S. federal government sector rated at 62% is still significantly lagging as compared to the private sector, which was rated at 77%, (McCarthy et al., 2020; Partnership for Public Service, 2019).

The specific problem addressed in this study was that only 48% of U.S. federal government employees indicated a positive response when asked if organizational leaders generate high levels of motivation and commitment in the workforce (U.S. Office of Personnel Management, 2022). As rated in the 2016 Federal Employee Viewpoint Survey, effective leadership was among the lowest of categories surveyed (Partnership for Public Service & Deloitte, 2016). While there has been extensive research on leadership and engagement in the private sector, more research is needed to understand the relationship between aspects of leadership and employee engagement in the federal government sector.

The purpose of this quantitative correlation study and primary research question was to determine to what extent, if any, does a relationship exist between perceptions of

leadership communication and effectiveness and employee engagement in the U.S. federal government sector. While past research has focused on engagement and leadership in the private sector, the purpose of the current study was to examine the relationship between perceptions of leadership communication and effectiveness and employee engagement within the U.S. federal government sector. This study may help fill the literature gap by providing a deeper understanding of how government leadership influences employee engagement.

Research Question and Hypotheses

To determine to what extent, if any, a relationship exist between perceptions of leadership communication and effectiveness and employee engagement in the U.S. federal government sector., the following research questions and hypotheses were considered.

RQ1: To what extent, if any, does a relationship exist between employee perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government?

H₀: There is no significant relationship between perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government.

H_a: There is a significant relationship between perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government.

RQ2: To what extent, if any, does a relationship exist between trust in leadership and employee engagement in the U.S. Federal Government?

H₀: There is no significant relationship between trust in leadership and employee engagement in the U.S. Federal Government.

H_a: There is a significant relationship between trust in leadership and employee engagement in the U.S. Federal Government.

RQ3: To what extent, if any, does a relationship exist between public service motivation and employee engagement in the U.S. Federal Government?

H₀: There is no significant relationship between public service motivation and employee engagement in the U.S. Federal Government.

H_a: There is a significant relationship between public service motivation and employee engagement in the U.S. Federal Government.

This chapter includes a description of the data collection process as well as the differences between the intended data collection and the actual process. This chapter also includes the results of the study to include the associated statistical analysis and corresponding research questions and hypotheses. These sections will be followed by a summary of this chapter and transition into Chapter 5.

Data Collection

The initial Institutional Review Board (IRB) approval was obtained on April 5, 2022, before the start data collection; Walden University's approval number for this study is 04-05-22-0400808. After six months and obtaining only thirty-four responses, a request for change in procedures was submitted and approved on October 7, 2022, to

amend the participant criteria from permanent, non-supervisory U.S. Federal government civilian employees who work within the Department of Defense to permanent, non-supervisory U.S. Federal government civilian employees. After an additional four months that yielded only fifty-two responses, a second request for change in procedures was submitted and approved on January 23, 2023. The change request included a request to allow me to explore potential options for use of a partner organization; permission to utilize convenience sampling in addition to snowball sampling; and permission to find a replacement market research audience panel since the current study questionnaire was ineligible for use of the initially proposed Survey Monkey audience.

In order to collect the survey sample using Survey Monkey audience, the survey used could not have more than eighty questions. The current study survey had a total of ninety-two questions. Therefore, after approval from the IRB, the Centiment Survey Panel was employed instead. To account for the change in participant criteria, question nine, “Are you currently employed by the Department of Defense as a Federal Government Civil Service Employee?” and question 10, “Please select your current Agency” were hidden in the online survey. The recruitment flyer and consent form were amended to reflect the participant criteria and convenience sampling was employed via Facebook and LinkedIn. After submitting inquiries to two different federal agencies, it was determined that the use of a partner organization was not feasible, untimely, and eventually unnecessary. Data collection was completed on April 20, 2023.

Participant Response

A total of 208 participants responded to the online survey. Thirteen responses were incomplete and removed from the sample. Fifty-four participants selected their supervisory status as Senior Leader, Manager, or Supervisory. Since these responses did not meet the participant criteria, they were removed from the sample. In testing of statistical assumptions, two responses were identified as outliers. After accounting for all incomplete and ineligible responses, the total sample size consisted of 139 eligible participants.

Study Results

Descriptive Statistics

Descriptive statistics analysis was used to explore participant demographics. The Table in Appendix G displays the frequency counts for the demographic variables. Eight respondents (5.8%) were Hispanic/Latino. About three quarters of the sample (73.4%) were white. Ages ranged from under 30 years old (7.9%) to 60 years or older (11.5%) with the median age being $Mdn = 44.50$ years. Sixty-three percent of the sample had at least a bachelor's degree. Twenty-five percent had a disability. About two thirds of the sample (67.6%) were female. Two respondents (1.4%) reported being transgender, and 88.5% reported being *straight, that is not gay or lesbian* (see Appendix G).

The table also displays the frequency counts for the employment variables. Thirty-five percent worked at headquarters, 39.6% worked in the field, and 25.9% did full-time telework. As for the telework details, 25.2% reported that they did telework every workday, and 25.9% reported that they did not do telework because they had to be

physically present on the job. Fourteen percent of the sample were team leaders. As for pay category/grade, the most frequent categories were GS 7 – 12 (41.7%), and GS 13 – 15 (24.5%). Seventy-six percent of the sample had no prior military service. Years with the federal government ranged from less than one year (2.2%) to more than 20 years (25.2%) with a median of $Mdn = 8$ years. Years with the current agency ranged from less than one year (7.9%) to more than 20 years (19.4%) with a median of $Mdn = 8$ years. When queried as to whether they would consider leaving in the next year, 61.9% responded *no*, with another 20.9% responding *yes, to take another job within the federal government*. As for current tenure, 48.2% were in the competitive service - tenure group 1, and another 21.6% were in excepted service - tenure group 1. As for occupational series, 23 separate categories were reported. The most common was 0300 - 0399 - General Administrative, Clerical, and Office Services (24.5%) (see Appendix G).

Table 4 displays the psychometric characteristics for the four scale scores. Cronbach's alpha statistical analysis was used to confirm the reliability of the scales used. The results of the Cronbach's alpha indicated a high level of internal consistency for each of the scales used (Cohen, 1988). All scale scores had acceptable levels of internal reliability. All scale scores had acceptable ranges for skewness and kurtosis (± 1 standard deviation, Laerd, 2023) (see Table 4).

Table 4*Psychometric Characteristics for the Scale Scores*

Scale Score	Items	<i>M</i>	<i>Mdn</i>	<i>SD</i>	Skewness	Kurtosis	Range	Low	High	α
Employee Engagement	9	4.71	4.78	1.31	-0.36	-0.50	6.00	1.00	7.00	.94
Leadership, Communication, and Effectiveness	19	4.45	4.42	1.47	-0.20	-0.73	6.00	1.00	7.00	.98
Trust in Leaders	20	3.28	3.45	1.14	-0.41	-0.82	4.00	1.00	5.00	.98
Public Service Motivation	24	4.73	4.67	0.71	-0.05	0.10	4.04	2.67	6.71	.87

Note. $N = 139$.

Statistical Assumptions

According to Laerd Statistics (2023), there are seven assumptions that need to be met for linear regression analysis:

1. Continuous dependent variable
2. Continuous independent variable
3. Linear relationship between dependent and independent variables
4. Independence of observations
5. No significant outliers
6. Homoscedasticity
7. Regression residuals are approximately normally distributed

Assumptions 1 (continuous dependent variable), 2 (continuous independent variable), and 4 (independence of observations) were met by the design of the study.

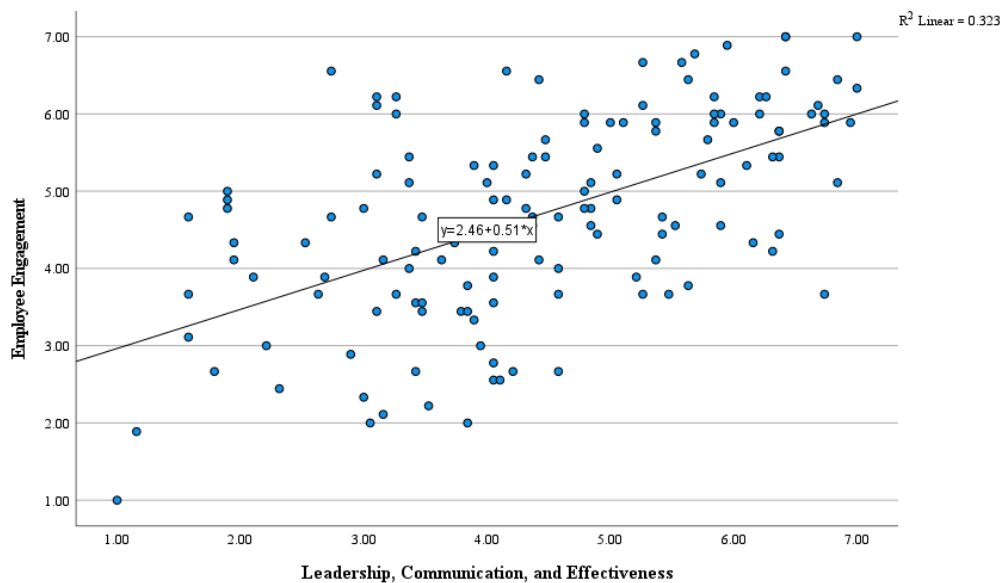
Assumption 3 (linear relationships) was met by inspection of the scatterplots (see Figures 2 through 4). Assumption 5 (no outliers or other influential points) was met based on examination of the casewise diagnostics, identifying studentized deleted residuals greater than ± 3 standard deviations, Cook's scores greater than 1.0, and leverage values greater

than 0.20. Specifically, two respondents were removed, leaving the final sample size to be $N = 139$. Assumption 6 (homoscedasticity) was met based on inspection of the relevant plots (see Figures 5 through 7). Assumption 7 (normally distributed residuals) was met based on inspection of the residual histograms (see Figures 8 through 10). Taken together, the assumptions for linear regression were met.

A scatterplot of the studentized residuals was used to establish if a linear relationship exists between the dependent and independent variables collectively. The assumption of linearity was confirmed via a scatterplot of the studentized residuals for Employee Engagement and Leadership Communication and Effectiveness. The assumption of linearity was met (see Figure 2).

Figure 2

Scatterplot of Employee Engagement with Leadership, Communication, and Effectiveness

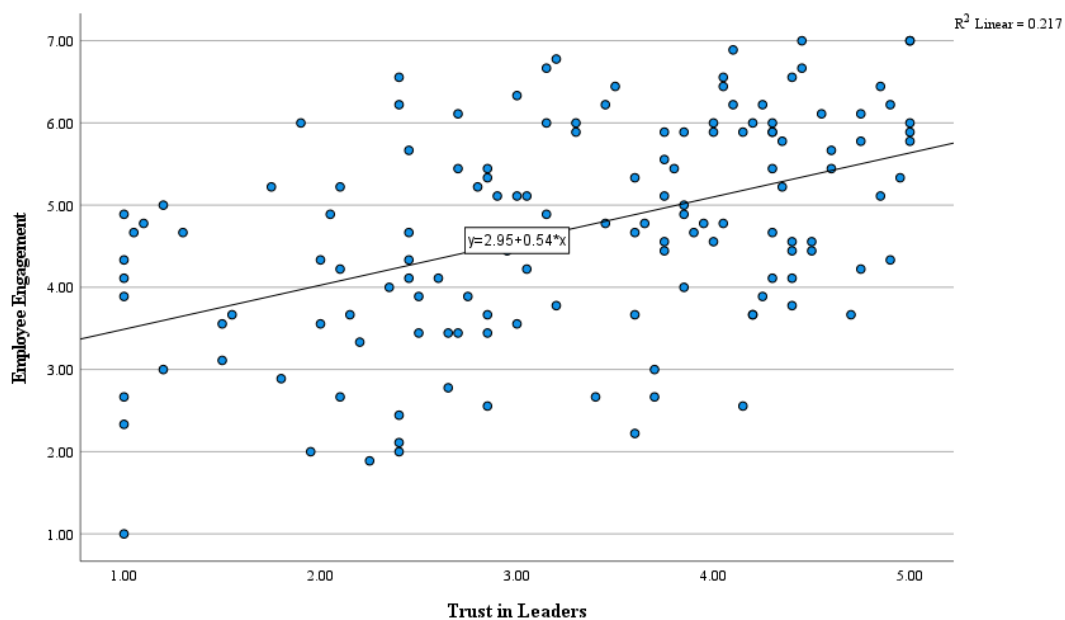


Note. $N = 139$.

A scatterplot of the studentized residuals was used to establish if a linear relationship exists between the dependent and independent variables collectively. The assumption of linearity was confirmed via a scatterplot of the studentized residuals for Employee Engagement and Trust in Leaders. The assumption of linearity was met (see Figure 3).

Figure 3

Scatterplot of Employee Engagement with Trust in Leaders

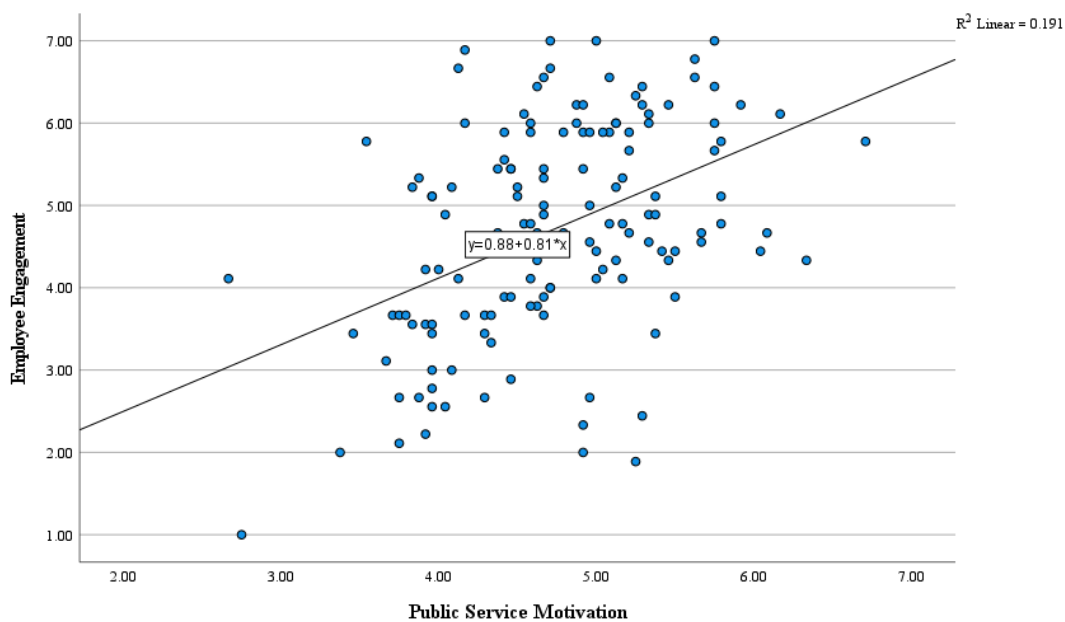


Note. $N = 139$.

A scatterplot of the studentized residuals was used to establish if a linear relationship exists between the dependent and independent variables collectively. The assumption of linearity was confirmed via a scatterplot of the studentized residuals for Employee Engagement and Public Service Motivation. The assumption of linearity was met (see Figure 4).

Figure 4

Scatterplot of Employee Engagement with Public Service Motivation

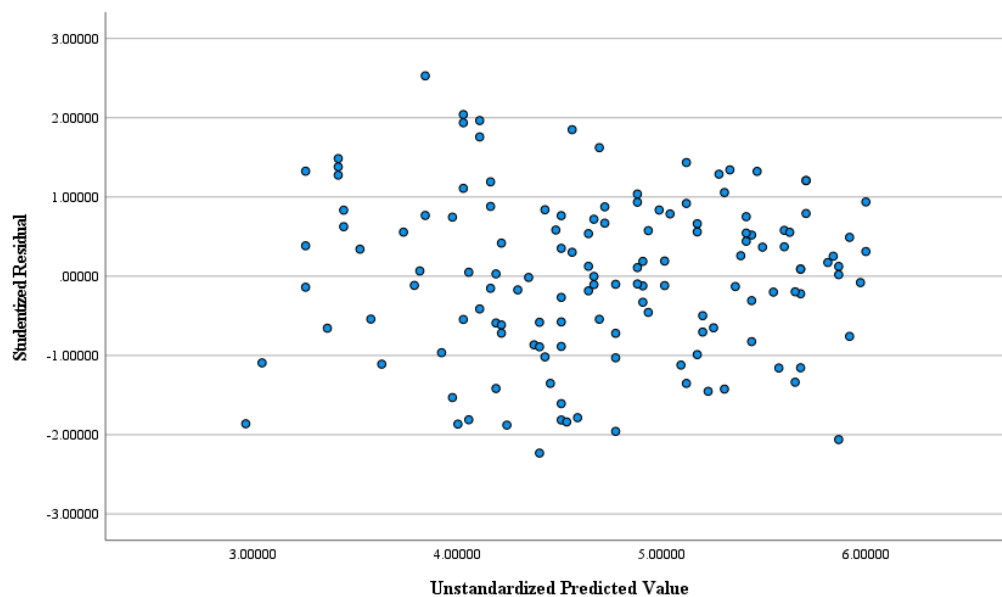


Note. $N = 139$.

A scatterplot was used to test the assumption of homoscedasticity. There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values for Employee Engagement and Leadership Communication and Effectiveness (see Figure 5).

Figure 5

Homoscedasticity Plot for Employee Engagement Score with Leadership, Communication, and Effectiveness Score

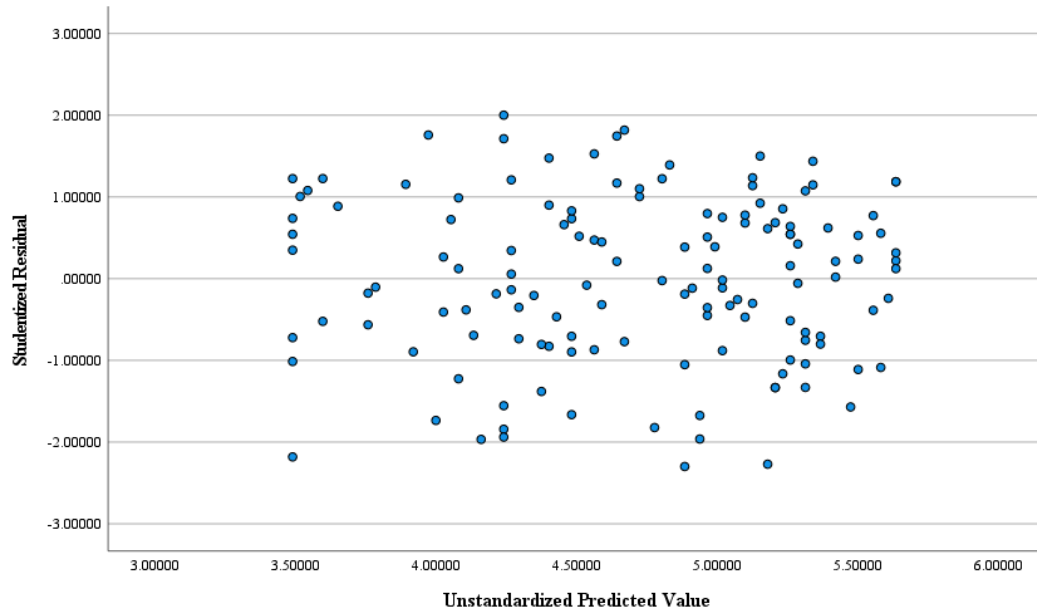


Note. $N = 139$.

A scatterplot was used to test the assumption of homoscedasticity. There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values for Employee Engagement and Trust in Leadership (see Figure 6).

Figure 6

Homoscedasticity Plot for Employee Engagement Score with Trust in Leadership Score

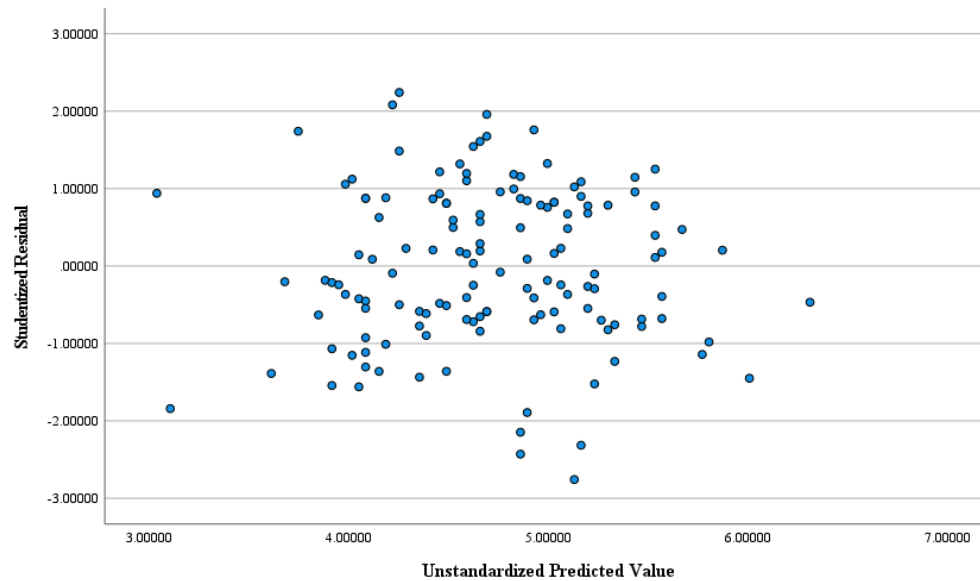


Note. $N = 139$.

A scatterplot was used to test the assumption of homoscedasticity. There was homoscedasticity, as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted values for Employee Engagement and Public Service Motivation (see Figure 7).

Figure 7

Homoscedasticity Plot for Employee Engagement Score with Public Service Motivation Score

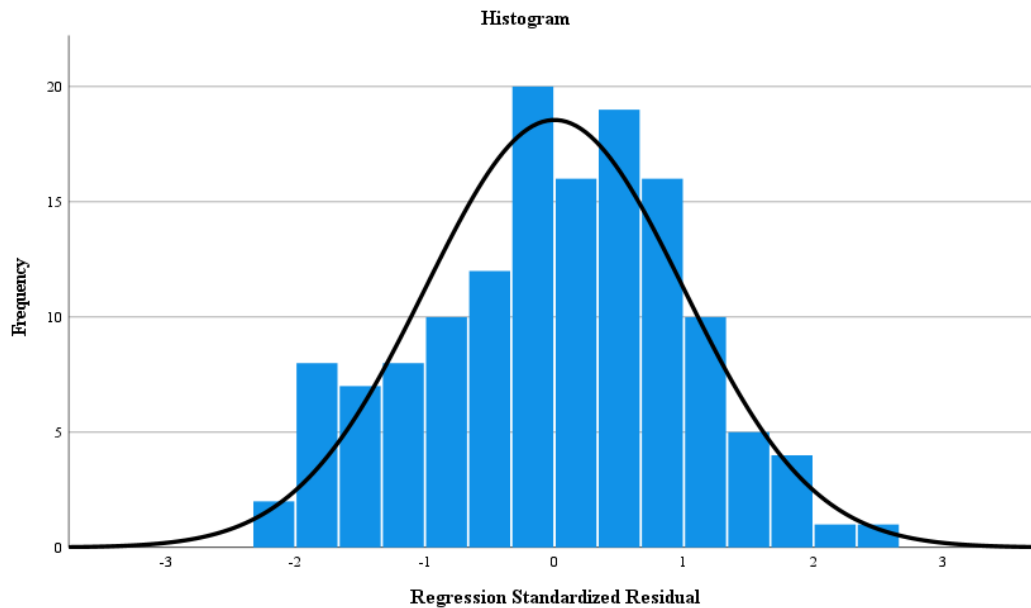


Note. $N = 139$.

A histogram was used to test the assumption of normality as depicted in the below Figure. The standardized residuals appeared to be approximately normally distributed therefore, the assumption of normality was met for Employee Engagement and Leadership Communication and Effectiveness (see Figure 8).

Figure 8

Residual Plot for Employee Engagement Score with Leadership, Communication, and Effectiveness Score

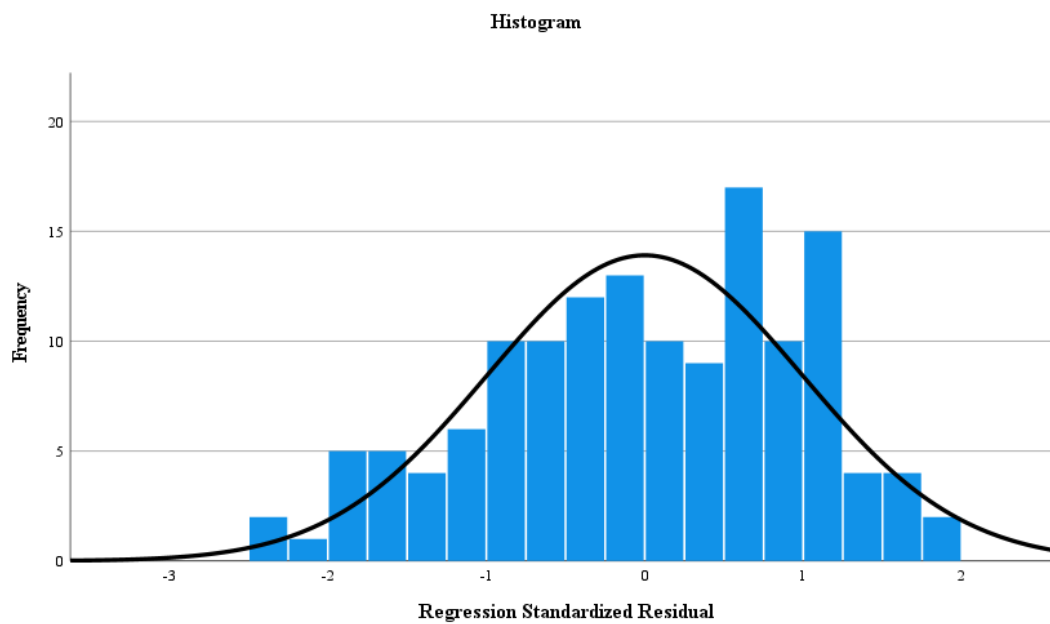


Note. $N = 139$.

A histogram was used to test the assumption of normality as depicted in the below Figure. The standardized residuals appeared to be approximately normally distributed therefore, the assumption of normality was met for Employee Engagement and Trust in Leadership (see Figure 9).

Figure 9

Residual Plot for Employee Engagement Score with Trust in Leadership Score

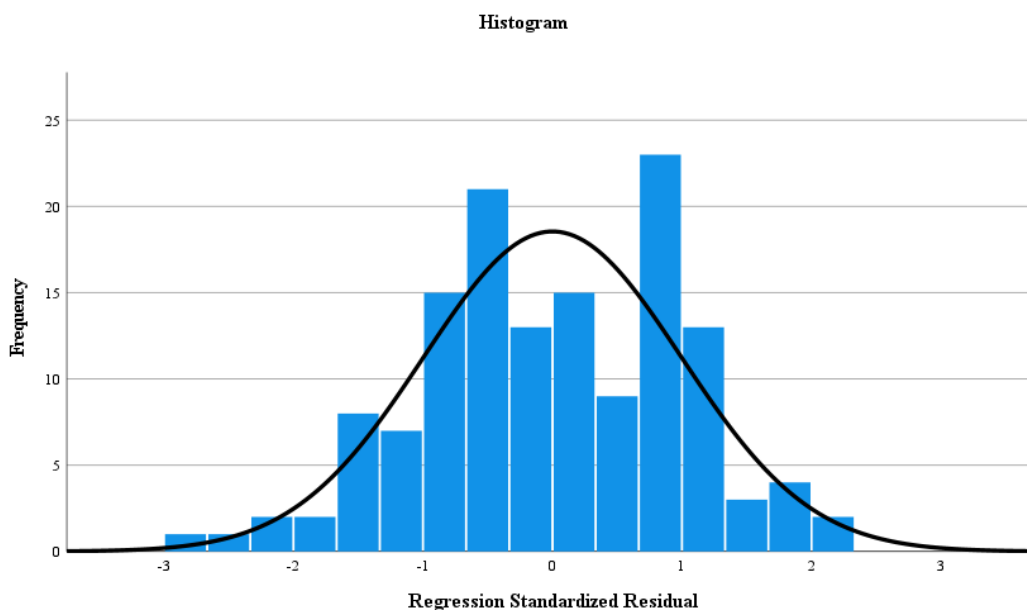


Note. $N = 139$.

A histogram was used to test the assumption of normality as depicted in the below Figure. The standardized residuals appeared to be approximately normally distributed therefore, the assumption of normality was met for Employee Engagement and Public Service Motivation (see Figure 10).

Figure 10

Residual Plot for Employee Engagement Score with Public Service Motivation Score



Note. N = 139.

Statistical Analysis Findings

Research Question 1 was, RQ1 – To what extent, if any, does a relationship exist between employee perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government? The related null hypothesis was: H_0 : There is no significant relationship between perceptions of leadership communication and levels of employee engagement. To answer this question, Table 5 displays the linear regression model predicting employee engagement based on the leadership, communication, and effectiveness score. The overall model was significant, $F(1, 137) = 65.50, p = .001$ and accounted for 32.3% of the variance in employee engagement. Inspection of the beta weight found a significant positive relationship ($\beta = .57, p = .001$). This provided support to reject the null hypothesis (see Table 5).

Table 5

Linear Regression Predicting Employee Engagement Based on Leadership, Communication, and Effectiveness

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	95% <i>CI</i>	
						Lower	Upper
Intercept	2.46	0.29		8.39	.001	1.88	3.04
Leadership, Communication, and Effectiveness	0.51	0.06	.57	8.09	.001	0.38	0.63

Note. $N = 139$; Final Model: $F(1, 137) = 65.50, p = .001. R^2 = .323.$ Durbin-Watson = 1.90.

Research Question 2 was, RQ2 – To what extent, if any, does a relationship exist between trust in leadership and employee engagement in the U.S. Federal Government? The related null hypothesis was, H_0 : There is no significant relationship between trust in leadership and employee engagement. To answer this question, Table 6 displays the linear regression model predicting employee engagement based on the trust in leadership

score. The overall model was significant, $F(1, 137) = 38.05, p = .001$ and accounted for 21.7% of the variance in employee engagement. Inspection of the beta weight found a significant positive relationship ($\beta = .47, p = .001$). This provided support to reject the null hypothesis (see Table 6).

Table 6

Linear Regression Predicting Employee Engagement Based on Trust in Leaders

Variable	B	SE	β	t	p	95% CI	
						Lower	Upper
Intercept	2.95	0.30		9.79	.001	2.36	3.55
Trust in Leaders	0.54	0.09	.47	6.17	.001	0.36	0.71

Note. $N = 139$; Final Model: $F(1, 137) = 38.05, p = .001, R^2 = .217$. Durbin-Watson = 1.90.

Research Question 3 was, RQ3 – To what extent, if any, does a relationship exist between public service motivation and employee engagement in the U.S. Federal Government? The related null hypothesis was, H_0 : There is no significant relationship between public service motivation and employee engagement. To answer this question, Table 7 displays the linear regression model predicting employee engagement based on the public service motivation score. The overall model was significant, $F(1, 137) = 32.37, p = .001$ and accounted for 19.1% of the variance in employee engagement. Inspection of the beta weight found a significant positive relationship ($\beta = .44, p = .001$). This provided support to reject the null hypothesis (see Table 7).

Table 7*Linear Regression Predicting Employee Engagement Based on Public Service Motivation*

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	95% <i>CI</i>	
						Lower	Upper
Intercept	0.88	0.68		1.29	.199	-0.47	2.23
Public Service Motivation	0.81	0.14	.44	5.69	.001	0.53	1.09

Note. $N = 139$; Final Model: $F(1, 137) = 32.37, p = .001, R^2 = .191$. Durbin-Watson = 1.97.

Summary

In summary, this quantitative correlation study gathered survey data from 139 participants to determine to what extent, if any, did a relationship exist between perceptions of leadership communication and effectiveness and employee engagement in the U.S. federal government sector. Hypothesis 1 (as related to the relationship between perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government) was supported (see Table 5). Hypothesis 2 (as related to relationship between trust in leadership and employee engagement in the U.S. Federal Government) was supported (see Table 6). Hypothesis 3 (as related to relationship between public service motivation and employee engagement in the U.S. Federal Government) was supported (see Table 7). In the final chapter, these findings will be compared to the literature, conclusions and implications will be drawn, and a series of recommendations will be suggested.

Chapter 5: Discussion, Conclusions, and Recommendations

A quantitative research method was an appropriate approach for addressing the research problem and research questions for this study. The purpose of this quantitative correlation study was to determine to what extent, if any, does a relationship exist between employee perceptions of leadership communication and effectiveness and employee engagement in the U.S. Federal Government. The independent variables were employee perceptions of leadership communication and effectiveness, employees' cognitive and affective trust in management and supervisor, and public service motivation. The Employee Perceptions of Vision and Leadership scale measured employee perceptions of leadership's ability to communicate the vision of the organization; visibility within the workplace; ability to manage organizational change; understand quality and facilitate process improvement; and foster effective communication (Schmidt & Akdere, 2007). The Trust in Leaders Instrument assessed an employee's cognitive and affective trust in management, and cognitive and affective trust in supervisor (Yang & Mossholder, 2010). The Public Service Motivation Scale measured an individual's drive to serve the public (Perry, 1996). The dependent variable was employee engagement. The Utrecht Work Engagement Scale measured work engagement defined as a positive, fulfilling work-related state of mind that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2006).

A quantitative research method allowed the researcher to explore the relationship or correlation between two or more variables and test a specific hypothesis concerning their relationship. A qualitative research method was not suitable for this study because

the goal of qualitative research is to study a phenomenon or the lived experiences of participants in their natural setting (Arghode, 2012). The quantitative approach was most suitable to address the research problem and research questions for this study in determining a relationship among variables.

A correlational design was most appropriate for this research study in that it utilizes survey research, in which participants respond to a set of questions about their perceptions of leadership and employee engagement. Rather than seeking a causal relationship, the goal of this research design was to allow me as the researcher to identify patterns and describe the relationship between variables (Frankfort-Nachmias & Nachmias, 2008). Because the purpose of an experimental research design is to determine causality through the random selection and control and manipulation of variables, an experimental design was not appropriate to address the research problem and research questions for this study.

Based on the findings of this study, there is sufficient evidence to support the hypotheses in reference to RQ1, RQ2, and RQ3 that there is a significant relationship between perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal government; a significant relationship between public service motivation and employee engagement in the U.S. Federal government; and a significant relationship between trust in leadership and employee engagement in the U.S. Federal government.

Interpretation of Findings

Based on the results of this study, there is a significant relationship between perceptions of leadership communication and effectiveness and levels of employee engagement in the U.S. Federal Government. This result was consistent with findings reported by Chandani et al. (2016) and Partnership for Public Service & Deloitte (2016), who found that effective leadership has contributed to increased levels of engagement and has been identified as a key driver of engagement. This result was also consistent with Reissner and Pagan (2013), who found that employees are more likely to participate or engage when they are kept informed of organizational developments. Employees respond positively to such communication because it makes them feel valued, involved, and enhances their desire to engage with the organization (Reissner and Pagan, 2013). It is also consistent with Holland et al. (2017) who asserted that “increased direct communication can facilitate increased employee engagement” (p. 924), and Jiang and Luo (2018) who found that authentic leadership had an indirect impact on employee engagement through transparent organizational communication.

Based on the findings of this study, there is also a significant relationship between trust in leadership and employee engagement in the U.S. Federal Government. This result was consistent with Basit (2017) who found that trust in a supervisor was a strong predictor of job engagement, and lower levels of employee trust in a supervisor resulted in lower levels of employee job engagement. It is also consistent with Ugwu et al. (2014), who found that organizational trust and psychological empowerment were predictors of work engagement, and Jiang and Luo (2018) who found that employee engagement had a

direct influence on the level of trust that employees had toward their organization.

According to Dale Carnegie research, the top three factors that impact levels of employee engagement are pride in the organization; trust in senior leadership; and relationship with an employee's immediate manager (Marone, 2020). According to Kahn and Heaphy (2013; c.f., Truss et al., 2013), an employee's level of engagement can be influenced by the contextual and interpersonal (or relational) factors within the workplace. This theory emphasizes the importance of work relationships on the completion of work tasks. These findings are also consistent as they relate to the relationship between trust in leadership and employee engagement.

The theoretical framework of this study was informed by the existing theories within the field of employee engagement and motivation. More specifically, Professor William A. Kahn's (1990) theory of personal engagement and the public service motivation theory (Perry, 1996). Public service motivation describes an individual's drive to serve the public. These individuals are committed to public service and strive to make a positive impact on society through their work (Bakker, 2015; Pandey et al., 2017). Public service motivation has been positively correlated with organizational outcomes such as job satisfaction, public sector job choice, employee performance, organizational performance, organizational commitment, and low employee turnover (Ritz et al., 2016). Based on the result of this study, there is a significant relationship between public service motivation and employee engagement in the U.S. Federal Government. According to Bakker (2015), more research is needed to understand the relationship between public

service motivation and daily work engagement and the ability to manage daily job demands.

According to Jin and McDonald (2017), “there have been fewer engagement studies of government organizations [and] much of what has been written about employee engagement comes from the corporate sector” (p. 882). Although the concept of employee engagement has gained popularity both in research and in practice, there is a need for more empirically driven scholarly research (Shuck, 2011). Concerning OPM’s employee engagement initiative and perceptions of organizational performance, Hameduddin and Fernandez (2019 citing Kettl, 2005) asserted that while administrative government reforms are often championed and even implemented with considerable effort, little attention is given to test the efficacy of these initiatives. Hameduddin and Fernandez (2019) further suggested that public administration scholars work with practitioners to provide empirical evidence of the efficacy in order to inform discussions related to employee engagement as an administrative government reform. McCarthy et al. (2020) indicated that “the majority of the research on engagement and turnover intention in the public sector is derived from state and local government employees, rather than [from] federal government employees” (p. 2). This study may help fill the literature gap by providing a deeper understanding of how trust in government leadership influences employee engagement in the U.S. Federal Government. Further, these findings may contribute to a better understanding of the impact of leadership communication and effectiveness and overall improved employee engagement in the federal government sector and the role of public service motivation on federal employee engagement.

Limitations of the Study

In this study, correlational data were used to assess the relationship between variables. Due to the nature of the study, a causal relationship cannot be established as the results of this study are limited to this extent. Additionally, the survey method used may not capture potentially useful qualitative data or narrative responses that would contribute to a deeper understanding of the relationship between the variables.

The sample size included in this study may also be a limiting factor. Small sample size may impact the statistical power of the overall findings. Power is “conventionally set at .80...which implies that a study investigating a true effect will correctly reject the null hypothesis 80% of the time and will report a false negative (commit a Type II error) in the remaining 20% of cases” (Brydges, 2019, p. 2). Cohen’s five-eighty convention, which is representative of $\alpha = .05$ and 80% power, is typically used as the standard for determining sample size (Sakai, 2016; Brydges, 2019; Di Stefano, 2003).

The participants of this study included current permanent non-supervisory civil service employees working within the U.S. Federal Government. According to the Office of Personnel Management, the US government is comprised of over two million civilian employees (Jennings & Nagel, 2018; Willhide, 2014), not including the US Postal Service (Governing, 2018). Using G*Power, the linear multiple regression test was selected to conduct an a priori power analysis. Based on Cohen’s d as a guideline in statistical testing, a value of 0.20 would represent a small effect size, 0.50 a medium effect size, and 0.80 a large effect size (Brydges, 2019). Using a medium effect size and five predictors, a sample size of at least 139 was required to achieve 80% power.

Although the desired sample size was achieved, due to the limiting participant criteria, the results of this study may not be generalizable to other populations.

Recommendations

Given the study findings and what is found in the existing literature, there is evidence of a significant relationship between perceptions of leadership communication and levels of employee engagement; a significant relationship between public service motivation and employee engagement; and a significant relationship between trust in leadership and employee engagement in the U.S. Federal government. However, there is a lack of knowledge in some areas related to the research methodology, additional populations, and the research design. Therefore, future research should address the following questions.

Is there a difference in how private sector employees come to experience engagement as compared to public sector engagement? What role does public service motivation play in this distinction? Extensive research has been done on engagement in the private sector and levels of engagement in the private sector are significantly higher than in the public sector. Federal employees have reported high levels of dissatisfaction with government leadership and large numbers of employees rate their leadership as ineffective (Lavigna, 2013). Future research could be done to explore a qualitative comparison of the lived experiences of private and public sector employees. Additional research could be done to identify key factors contributing to the differences between private and public sector leadership as it relates to employee engagement and leadership effectiveness.

How do components of job satisfaction or organizational commitment influence employee engagement for public sector employees? Do concepts like emotional attachment or feeling of empowerment influence public sector employee public service motivation and its relationship with employee engagement? In his study of engagement, Bakker (2015) explained the differences between engagement and similar management constructs. He argued that engagement elements such as vigor, energy, and enthusiasm differ from other components of job satisfaction like happiness, contentment, and pleasure. However, according to Jha and Kumar (2016), one method of measuring or gauging engagement is to assess an employee's level of job satisfaction, organizational commitment, involvement, emotional attachment, and feeling of empowerment. Future research should be done to examine the relationship between these organizational variables.

How do highly engaged federal employees cope with unique leadership challenges? According to Lavigna (2013), public sector employees experience unique leadership challenges including frequently changing political leadership, hard-to-measure performance goals, bureaucratic decision-making, influential power of multiple external stakeholders, strict employment rules and regulations, budget constraints, and high visibility of government actions. These same factors may also impact the levels of engagement for federal government employees (Lavigna, 2013). Future research should be done to assess the relationship between these factors and public sector employee engagement.

Lastly, how does employee engagement, public service motivation, and perceptions of leadership change over time for a career federal employee? Is this experience different for an employee who has worked in both the public and private sector throughout their career? The target population for this study was permanent, non-supervisory U.S. Federal Government civilian employees. Future research should be done to investigate other populations. Future studies could compare the experiences or perceptions of permanent and non-permanent U.S. Federal Government civilian employees as well as the engagement levels of supervisory and non-supervisory federal employees. More research is also needed to compare multiple federal agencies in order to determine what additional organizational factors may contribute to federal employee engagement. A longitudinal study could be done to follow federal employees throughout their government career as they take on new positions, advance in tenure, and potentially work for various government organizations.

Implications

According to Dale Carnegie research, the top three factors that impact levels of employee engagement are pride in the organization; trust in senior leadership; and relationship with an employee's immediate manager (Marone, 2020). Organizational teams with managers who make employee engagement a daily priority were almost three times more engaged than teams whose managers did not (Marone, 2020). Sixty-one percent of employees who had confidence in their leadership abilities and believed that senior leaders are moving the organization in the right direction were fully engaged (Porges, 2013).

It was estimated that disengagement in the federal government costs up to \$65 billion taxpayer dollars in lost employee productivity per year (Rivera & Flinck, 2011). According to Rivera and Flinck (2011), “making the case for employee engagement can be extremely challenging in the federal government” (p. 486). Getting federal agency leaders to examine and invest in data related to employee engagement can be difficult for federal Human Resource Development scholar-practitioners. In an environment solely driven by mission success coupled with the expectation to do more with less, it can be a challenge for agency leaders to realize that “mission success is only possible through collective employee success” (Rivera & Flinck, 2011, p. 486).

Significance to Theory

According to Jin and McDonald (2017), “there have been fewer engagement studies of government organizations [and] much of what has been written about employee engagement comes from the corporate sector” (p. 882). Although the concept of employee engagement has gained popularity both in research and in practice, there is a need for more empirically driven scholarly research (Shuck, 2011). This study may help contribute to filling the gap in the existing literature and empirical research on employee engagement in the federal government workplace by providing an empirical understanding of the relationship between perceptions of leadership communication and effectiveness; public service motivation; trust in leadership and employee engagement in the U.S. Federal government. According to the Partnership for Public Service Best Places to Work survey, effective leadership has been identified as a key driver of federal employee engagement since the Best Places to Work survey was first established in 2003.

In 2019, effective leadership was ranked as the second-lowest category (Partnership for Public Service, 2021a). An empirical study of engagement and leadership in the federal sector can help to inform the existing body of knowledge and provide a foundation for future research.

Significance to Practice

Employee engagement has been linked to positive business outcomes such as productivity, profitability, and customer engagement (Sorenson & Garman, 2013; Marone, 2020). Conversely, actively disengaged employees who are emotionally disconnected may actively work against their employers' interests. Disengaged employees are less productive and more likely to steal from their organization, negatively influence their coworkers, miss workdays, and drive customers away (Sorenson & Garman, 2013). Gallup estimates that actively disengaged employees cost the U.S. up to \$550 billion per year in lost productivity (Sorenson & Garman, 2013). According to Gallup, managers are primarily responsible for their employees' engagement and should be selected to leadership positions based on their ability to effectively manage employee engagement (Sorenson & Garman, 2013). Engagement should be embedded into the daily organizational activities and management-employee interactions. Organizations should provide coaching and hold managers accountable for their employees' engagement and managers should be required to build engagement plans (Sorenson & Garman, 2013).

The findings of this study may inform professional practice in that they may help managers understand the relationship between employee perceptions of leadership and the increase or decrease in employee engagement. This study may contribute and support

the development of management consulting strategies and future research in this field. Federal leaders compete with the private sector when recruiting for top talent. Having an organizational culture that fosters high levels of employee engagement can help agencies attract and retain their top performers. According to the Partnership for Public Service (2021b), “having a highly-motivated and engaged workforce is critical to a well-functioning government and the success of our country” (para 6). An engaged federal workforce has the potential to provide better services to the American public. The results of this study may be useful to federal employees, managers, and human resource professionals within the public sector. It may be useful to OPM and the MSPB to further substantiate and assist in achieving its goals towards increasing federal employee engagement.

Significance to Social Change

Job engagement is the positive opposite of burnout (Maslach, 1982). According to the American Institute of Stress (2002 as cited by Halbesleben et al., 2006), “stress and burnout accounted for about 300 million lost working days [costing] American businesses an estimated \$300 billion per year” (p. 244). Burnout can be defined as a “psychological response to chronic work stress characterized by emotional exhaustion (a depletion of emotional and physical resources), disengagement (detachment from the job), and reduced feelings of personal job-related efficacy” (Halbesleben et al., 2006, p. 245; Maslach, 1982). Maslach (1982) described burnout as a type of job stress or “syndrome of emotional exhaustion, depersonalization, and reduced personal accomplishment that can occur among individuals who do “people-work”” (p. 2). Like

other job stressors, burnout may result in similar adverse effects for an individual.

However, burnout is unique in that it is the direct consequence or result of the social interaction between a “helper” and its “recipient.” The emotional exhaustion or depletion of emotional and physical resource occurs when a person “feels overwhelmed by the emotional demands imposed by other people” (Maslach, 1982, p. 3). Once an individual experiences emotional exhaustion, they may feel that they are no longer able, or lack the motivation to, give of themselves to others (Maslach, 1982).

This study may contribute to positive social change in that better understanding of leadership and employee engagement may contribute to increased job satisfaction and overall productivity in the workplace. Job burnout and work stress can have a negative impact on both employees and their families. Individuals spend a significant amount of time at work and can encounter challenges related to work-life balance and employee well-being. When compared to the private sector, public sector organizations experience a perceived higher stress (Breugh, 2021). “Political and administrative changes associated with new public management such as performance-based reforms, cutbacks, red tape, work intensification due to budgetary constraints, and tighter deadlines have all been associated with creating cultures of higher stress in public organizations” (Breugh, 2021, p. 87). As a result of the economic crisis, there is an “increased need for public organizations to cut back on expenses and improve efficiency” (Voet & Vermeeren, 2017, p. 230). According to Voet and Vermeeren (2017), cutbacks can have a negative impact on the organizational commitment and work engagement of public sector employees. Cutbacks may result in a decrease in job satisfaction and morale and an

increase in work-related stress and intention to leave (Voet & Vermeeren, 2017; Levine, 1984). A motivated and efficient civil service is necessary for good governance. The civil service is critical in the implementation of economic policy reform, management of public expenditure and revenue, and sustainability of public finances. Access to public goods and services depends on the skills and motivation of the civil servants who provide these services (Rao, 2013). Organizational culture and specifically an increase in employee engagement can have a positive impact on employee morale and job satisfaction in the federal workplace.

Conclusions

While levels of engagement have slightly increased, employee engagement in the U.S. federal government sector still significantly lags as compared to the private sector. When asked if organizational leaders generate high levels of motivation and commitment in the workforce, only 48% of U.S. federal government employees indicated a positive response. While there has been extensive research on leadership and engagement in the private sector, more research is needed to understand the relationship between aspects of leadership and employee engagement in the federal government sector.

The purpose of this quantitative correlation study and primary research question was to determine to what extent, if any, does a relationship exist between perceptions of leadership communication and effectiveness and employee engagement in the U.S. federal government sector. The theoretical framework of this study was informed by Professor William A. Kahn's (1990) theory of personal engagement and the public service motivation theory (Perry, 1996). A quantitative correlation research design was

used to explore the relationship between the independent and dependent variables. To test the research hypothesis, a linear regression analysis was conducted. An online survey was distributed via email and posted to social media groups to solicit the participation of federal employees worldwide. A total of 139 participants were included in this study.

An engaged federal workforce has the potential to provide better services to the American public. In this study, the findings suggest that there is a significant relationship between perceptions of leadership communication and effectiveness and levels of employee engagement; a significant relationship between public service motivation and employee engagement; and a significant relationship between trust in leadership and employee engagement in the U.S. Federal government. The results of this study may have a significant impact on employees, managers, and human resource professionals within the public sector. These findings may contribute to a better understanding of the relationship between leadership and overall improved employee engagement in the federal sector.

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Appendix A: Drivers of Employee Engagement

Factors that Predict Employee Engagement

Career development

Effective Talent Management

Leadership

Clarity of Company Values, Policies and Practices

Respectful Treatment of Employees

Company Standards of Ethical Behaviors

Empowerment

Fair Treatment

Performance Appraisal

Pay and Benefits

Health and Safety

Satisfaction

Family Friendliness

Talent Recognition

Communication

Nature of Job

Organization Politics

Emotional Factors

Productivity

Personality Factors

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Appendix B: Comparison of a multidimensional versus a unidimensional measure of

Public Service Motivation

Dimensions and items	Mean	SD	Factor loadings
Multidimensional measure of PSM			
<i>Attraction to public service (APS)</i>			
V1: I admire people who initiate or are involved in activities to aid my community.	3.99	.654	.792
V2: It is important to contribute to activities that tackle social problems.	3.91	.617	.902
V3: Meaningful public service is very important to me.	3.64	.695	.810
V4: It is important for me to contribute to the common good.	3.79	.647	.876
<i>Commitment to public values (CPV)</i>			
V5: I think equal opportunities for citizens are very important.	4.04	.649	.852
V6: It is important that citizens can rely on the continuous provision of public services.	3.96	.614	.865
V7: It is fundamental that the interests of future generations are taken into account when developing public policies.	4.19	.642	.833
V8: To act ethically is essential for public servants.	4.23	.673	.782
<i>Compassion (COM)</i>			
V9: I feel sympathetic to the plight of the underprivileged.	3.90	.653	.905
V10: I empathize with other people who face difficulties.	3.97	.607	.911
V11: I get very upset when I see other people being treated unfairly.	3.99	.691	.753
V12: Considering the welfare of others is very important.	3.93	.644	.885
<i>Self-sacrifice (SS)</i>			
V13: I am prepared to make sacrifices for the good of society.	3.28	.729	.838
V14: I believe in putting civic duty before self.	3.34	.766	.793

Dimensions and items	Mean	SD	Factor loadings
V15: I am willing to risk personal loss to help society.	3.10	.828	.797
V16: I would agree to a good plan to make a better life for the poor, even if it costs me money.	3.66	.728	.798
Unidimensional measure of PSM (PSM-UM)			
S1: Meaningful public service is important to me.	3.64	.695	.509
S2: I am not afraid to go to bat for the rights of others even if it means I will be ridiculed.	3.18	.770	.824
S3: Making a difference in society means more to me than personal achievements.	3.25	.775	.886
S4: I am prepared to make enormous sacrifices for the good of society.	2.89	.865	.805
S5: I am often reminded by daily events about how dependent we are on one another.	3.50	.725	.557

Note. Adapted from Kim, S. (2017). Comparison of a multidimensional to a unidimensional measure of public service motivation: predicting work attitudes.

International Journal of Public Administration, 40(6), 504–515.

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Online Survey Study Seeks Participants who work within the Federal Sector



There is a new study called “*Employee Engagement and Leadership in the Federal Sector*” that could help government leaders better understand how leadership influences employee engagement in the public sector. For this study, you are invited to describe your perceptions of leadership communication and employee engagement.

This survey is part of the doctoral study for Quanequa Tequila Pringle, a Ph.D. student at Walden University.

About the study:

- One 20-30-minute online survey
- To protect your privacy, no names will be collected

Volunteers must meet these requirements:

- Permanent, non-supervisory civil service employee



To confidentially volunteer, select the following link:
<https://www.surveymonkey.com/r/FutureDrKila>

Appendix D: Demographics Questionnaire

Employment Demographics

Where do you work?

- Headquarters
- Field
- Full-time telework (e.g., home office, telecenter)

Please select the response that BEST describes your teleworking schedule

- I telework every work day
- I telework 3 or 4 days per week
- I telework 1 or 2 days per week
- I telework, but only about 1 or 2 days per month
- I telework very infrequently, on an unscheduled or short-term basis
- I do not telework because I have to be physically present on the job (e.g., law enforcement officers, TSA agent, border patrol agent, security personnel)
- I do not telework because of technical issues (e.g., connectivity, inadequate equipment) that prevent me from teleworking
- I do not telework because I did not receive approval to do so, even though I have the kind of job where I can telework
- I do not telework because I choose not to telework

What is your supervisory status?

- Senior Leader
- Manager
- Supervisor
- Team Leader
- Non-Supervisor

What is your pay category/grade?

- Federal Wage System
- GS 1-6
- GS 7-12
- GS 13-15
- Senior Executive Service
- Senior Level (SL) or Scientific or Professional (ST)
- Other

What is your US military service status?

- No Prior Military Service
- Currently in National Guard or Reserves
- Retired

- Separated or Discharged

How long have you been with the Federal Government (excluding military service)?

- Less than 1 year
- 1 to 3 years
- 4 to 5 years
- 6 to 10 years
- 11 to 14 years
- 15 to 20 years
- More than 20 years

How long have you been with your current agency (for example, Department of Navy, Defense Logistics Agency)?

- Less than 1 year
- 1 to 3 years
- 4 to 5 years
- 6 to 10 years
- 11 to 14 years
- 15 to 20 years
- More than 20 years

Are you considering leaving your organization within the next year, and if so, why?

- No
- Yes, to retire
- Yes, to take another job within the Federal Government
- Yes, to take another job outside the Federal Government
- Yes, other

Are you currently employed by the Department of Defense as a Federal Government Civil Service Employee?

- Yes
- No

Please select your current Agency.

- DEPARTMENT OF AIR FORCE
- DEPARTMENT OF ARMY
- DEPARTMENT OF NAVY
- OFFICE OF THE SECRETARY OF DEFENSE
- ORGANIZATION OF THE JOINT CHIEFS OF STAFF
- DEFENSE INFORMATION SYSTEMS AGENCY
- DEFENSE SECURITY COOPERATION AGENCY
- DEFENSE LOGISTICS AGENCY
- U.S. COURT OF APPEALS FOR THE ARMED FORCES
- DEFENSE CONTRACT AUDIT AGENCY

- DEFENSE COUNTERINTELLIGENCE AND SECURITY AGENCY
- DEFENSE ADVANCED RESEARCH PROJECTS AGENCY
- UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES
- DEPARTMENT OF DEFENSE EDUCATION ACTIVITY
- WASHINGTON HEADQUARTERS SERVICES
- OFFICE OF ECONOMIC ADJUSTMENT
- DEFENSE LEGAL SERVICES AGENCY
- OFFICE OF THE INSPECTOR GENERAL
- MISSILE DEFENSE AGENCY
- DEFENSE TECHNOLOGY SECURITY ADMINISTRATION
- DEFENSE COMMISSARY AGENCY
- DEFENSE FINANCE AND ACCOUNTING SERVICE
- DEFENSE HUMAN RESOURCES ACTIVITY
- DEFENSE POW/MIA ACCOUNTING AGENCY
- DEFENSE HEALTH AGENCY
- DEFENSE THREAT REDUCTION AGENCY
- DEFENSE CONTRACT MANAGEMENT AGENCY
- PENTAGON FORCE PROTECTION AGENCY
- DEPARTMENT OF DEFENSE TEST RESOURCE MANAGEMENT CENTER
- NATIONAL DEFENSE UNIVERSITY
- DEFENSE MICROELECTRONICS ACTIVITY
- DEFENSE TECHNICAL INFORMATION CENTER
- DEFENSE MEDIA ACTIVITY
- DEFENSE ACQUISITION UNIVERSITY
- NATIONAL RECONNAISSANCE OFFICE
- MILITARY TREATMENT FACILITIES UNDER DHA
- SPACE DEVELOPMENT AGENCY
- OTHER

Please select your current Tenure.

- Competitive service--Tenure group 1 (includes employees serving under career appointments).
- Excepted service--Tenure group 1 (includes permanent employees whose appointments carry no restriction or condition).
- Competitive service--Tenure group 2 (includes employees serving under career-conditional appointments).
- Excepted service--Tenure group 2 (includes employees who are serving trial periods, or whose tenure is equivalent to career-conditional tenure in the competitive service).
- Competitive service--Tenure group 3 (includes indefinite employees, employees under temporary appointments).
- Excepted service--Tenure group 3 (includes employees whose tenure is indefinite).
- NO TENURE GROUP - EMPLOYEES (E.G., TEMPORARIES OR SES).

Please select your current Occupational Series.

- 0000 - 0099 - Miscellaneous Occupations
- 0100 - 0199 - Social Science, Psychology, and Welfare
- 0200 - 0299 - Human Resources Management
- 0300 - 0399 - General Administrative, Clerical, and Office Services
- 0400 - 0499 - Biological Sciences
- 0500 - 0599 - Accounting and Budget
- 0600 - 0699 - Medical, Hospital, Dental, and Public Health
- 0700 - 0799 - Veterinary Medical Science
- 0800 - 0899 - Engineering and Architecture
- 0900 - 0999 - Legal and Kindred
- 1000 - 1099 - Information and Arts
- 1100 - 1199 - Business and Industry
- 1200 - 1299 - Copyright, Patent, and Trade-Mark
- 1300 - 1399 - Physical Sciences
- 1400 - 1499 - Library and Archives
- 1500 - 1599 - Mathematics and Statistics
- 1600 - 1699 - Equipment, Facilities, and Service
- 1700 - 1799 - Education
- 1800 - 1899 - Inspection, Investigation, Enforcement, and Compliance
- 1900 - 1999 - Quality Assurance, Inspection and Grading
- 2000 - 2099 - Supply
- 2100 - 2199 - Transportation
- 2200 - 2299 - Information Technology Management

Personal Demographics

Are you of Hispanic, Latino, or Spanish origin?

- Yes
- No

Are you:

- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Two or more races

What is your age group?

- 25 years and under
- 26-29 years old

- 30-39 years old
- 40-49 years old
- 50-59 years old
- 60 years or older

What is the highest degree or level of education you have completed?

- Less than High School
- High School Diploma/GED or equivalent
- Trade or Technical Certificate
- Some College (no degree)
- Associate's Degree (e.g., AA, AS)
- Bachelor's Degree (e.g., BA, BS)
- Master's Degree (e.g., MA, MS, MBA)
- Doctoral/Professional Degree (e.g., Ph.D., MD, JD)

Are you an individual with a disability?

- Yes
- No

Are you:

- Male
- Female

Are you transgender?

- Yes
- No

Which one of the following do you consider yourself to be?

- Straight, that is not gay or lesbian
- Gay or Lesbian
- Bisexual
- Something else

Appendix E: Instrumentation and Operationalization of Constructs

Public Service Motivation Scale

Scale

- 1 = Strongly disagree (SD)
- 2 = Disagree (D)
- 3 = Somewhat disagree
- 4 = Neither disagree or agree (neutral) (N)
- 5 = Somewhat agree
- 6 = Agree (A)
- 7 = Strongly agree (SA)

Survey

1. It is difficult for me to contain my feelings when I see people in distress.
2. Meaningful public service is very important to me.
3. I am prepared to make enormous sacrifices for the good of society.
4. I unselfishly contribute to my community.
5. I don't care much for politicians.
6. I think people should give back to society more than they get from it.
7. I would prefer seeing public officials do what is best for the whole community even if it harmed my interests.
8. Most social programs are too vital to do without.
9. I am often reminded by daily events of how dependent we are on one another.
10. I am one of those rare people who would risk personal loss to help someone else.
11. The give and take of public policy making doesn't appeal to me.
12. Making a difference in society means more to me than personal achievements.
13. To me, patriotism includes seeing to the welfare of others.
14. I have little compassion for people in need who are unwilling to take the first step to help themselves.
15. Serving other citizens would give me a good feeling even if no one paid me for it.
16. There are few public programs that I wholeheartedly support.
17. Politics is a dirty word.
18. I seldom think about the welfare of people I don't know personally.
19. Doing well financially is definitely more important to me than doing good deeds.
20. It is hard for me to get intensely interested in what is going on in my community.
21. Much I do is for a cause bigger than myself.
22. I consider public service my civic duty.
23. I am rarely moved by the plight of the underprivileged.
24. I believe in putting duty before self.

Trust in Leaders Instrument

Responses are given along a five-point response format, ranging from 1 (“strongly disagree”) to 5 (“strongly agree”).

Cognitive trust in management

1. I can depend on management to meet its responsibilities.
2. I can rely on management to do what is best at work.
3. Top managers follow through with commitments they make.
4. Given management's track record, I see no reason to doubt its competence.
5. I'm confident in management because it approaches work with professionalism.

Affective trust in management

1. I'm confident that management will always care about my personal needs at work.
2. If I shared my problems with management, I know they would respond with care.
3. I'm confident that I could share my work difficulties with management.
4. I'm sure I could openly communicate my feelings to management.
5. I feel secure with management because of its sincerity.

Cognitive trust in supervisor

1. I can depend on my supervisor to meet his/her responsibilities.
2. I can rely on my supervisor to do what is best at work.
3. My supervisor follows through with commitments s(he) makes.
4. Given my supervisor's track record, I see no reason to doubt his/her competence.
5. I'm confident in my supervisor because (s)he approaches work with professionalism.

Affective trust in supervisor

1. I'm confident that my supervisor will always care about my personal needs at work.
2. If I shared my problems with my supervisor, I know (s)he would respond with care.
3. I'm confident that I could share my work difficulties with my supervisor.
4. I'm sure I could openly communicate my feelings to my supervisor.
5. I feel secure with my supervisor because of his/her sincerity.

Utrecht Work Engagement Scale-9

All items are scored on a 7-point frequency rating scale ranging from 0 (never) to 6 (always/every day).

Items

The following statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the "0" (zero) in the space after the statement. If you have had this feeling, indicate how often you felt it by crossing the number (from 1 to 6) that best describes how frequently you feel that way.

1. At my work, I feel bursting with energy. (VI1)
4. At my job, I feel strong and vigorous. (VI2)
5. I am enthusiastic about my job. (DE2)
7. My job inspires me. (DE3)
8. When I get up in the morning, I feel like going to work. (VI3)
9. I feel happy when I am working intensely. (AB3)
10. I am proud of the work that I do. (DE4)
11. I am immersed in my work. (AB4)
14. I get carried away when I am working. (AB5)

Source: Schaufeli and Bakker (2003).

Note: VI = Vigor scale; DE = Dedication scale; AB = Absorption

19 Items on Organizational Vision and Leadership

Scale anchors are 1, 2, 3, 4, 5, 6, or 7; where (1) Not at all ... (4) Sometimes ... (7) Always

Vision

Our leadership staff sets the direction of our organization.

Our organization has a vision which has been the focus of our energies.

All employees support the vision of this organization.

Our leadership staff has a clear set of priorities.

Visibility

Our leadership staff is visible in the organization.

Our leadership staff knows the names of employees.

Our leadership staff displays a sense of caring when walking around the facility.

Change

Our leadership staff encourages learning and growth.

Our leadership staff encourages employees to take on new initiatives.

Our leadership staff is willing to take risks.

Our leadership staff ensures that employees adhere to the organizational standards.

Understanding Quality

Our leadership staff encourages employees to participate in the improvement efforts.

Our leadership staff successfully manages organizational changes to improve the quality of our products and services.

Our leadership staff is the driving force behind quality improvement efforts.

Our leadership staff allocates adequate resources (people, time, dollars, equipment) to improve quality.

Communication

Our leadership staff listens to employees.

Our leadership staff places a priority on communication with employees.

Our leadership staff is approachable.

Our leadership staff is honest.

Appendix F: Permission to use Survey Instrument

On Jun 12, 2021, at 9:18 AM, Schmidt, Steven <SCHMIDTST@ecu.edu> wrote:

Hi Kila,

Yes, you can use my JTJS instrument in your research if you would like. I do ask that you cite my work appropriately and that you send me the results of your study when it's complete. Good luck with your research project.

Steve

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Appendix G: Frequency Counts for Demographic Variables

Variable	Category	<i>n</i>	%
13. Hispanic/Latino	Yes	8	5.8
	No	131	94.2
14. Race/Ethnicity	Black or African American	20	14.4
	White	102	73.4
	Other Race/Ethnicity	15	10.8
15. Age group	Under 30 years	11	7.9
	30-39 years old	46	33.1
	40-49 years old	32	23.0
	50-59 years old	34	24.5
	60 years or older	16	11.5
16. Highest degree	High School Diploma/GED or less	10	7.2
	Some College (no degree)	25	18.0
	Associate's Degree (e.g., AA, AS)	17	12.2
	Bachelor's Degree (e.g., BA, BS)	47	33.8
	Master's Degree (e.g., MA, MS, MBA)	31	22.3
	Doctoral/Professional Degree	9	6.5
17. Has a disability	Yes	34	24.5
	No	105	75.5
18. Gender	Male	45	32.4
	Female	94	67.6
19. Transgender	Yes	2	1.4
	No	137	98.6
20. Sexual orientation	Straight, that is not gay or lesbian	123	88.5
	Gay or Lesbian	3	2.2
	Bisexual	9	6.5
	Something else	4	2.9

Frequency Counts for Demographic Variables (Employment)

Variable	Category	<i>n</i>	%
1. Where they work	Headquarters	48	34.5
	Field	55	39.6
	Full-time telework (e.g., home office, telecenter)	36	25.9
2. Telework Details	I telework every work day	35	25.2
	I telework 3 or 4 days per week	22	15.8
	I telework 1 or 2 days per week	21	15.1
	I telework, but only about 1 or 2 days per month	1	0.7
	I telework very infrequently, on an unscheduled or short-term basis	10	7.2
	I do not telework because I have to be physically present on the job (e.g., law enforcement officers, TSA agent, border	36	25.9
	I do not telework because I did not receive approval to do so, even though I have the kind of job where I can telework	10	7.2
	I do not telework because I choose not to telework	4	2.9
	3. Supervisory Status	Team Leader	19
Non-Supervisor		120	86.3
4. Pay category/grade	Federal Wage System	19	13.7
	GS 1-6	12	8.6
	GS 7-12	58	41.7
	GS 13-15	34	24.5
	Other	16	11.5

Table *Continued*

Table *Continued*

Variable	Category	<i>n</i>	%
5. US military service status?	No Prior Military Service	105	75.5
	Currently in National Guard or Reserves	3	2.2
	Retired	8	5.8
	Separated or Discharged	23	16.5
6. Years with Federal Government	Less than 1 year	3	2.2
	1 to 3 years	25	18.0
	4 to 5 years	13	9.4
	6 to 10 years	29	20.9
	11 to 14 years	14	10.1
	15 to 20 years	20	14.4
	More than 20 years	35	25.2
7. Years with Current Agency	Less than 1 year	11	7.9
	1 to 3 years	34	24.5
	4 to 5 years	10	7.2
	6 to 10 years	28	20.1
	11 to 14 years	12	8.6
	15 to 20 years	17	12.2
	More than 20 years	27	19.4
8. Considering leaving in next year	No	86	61.9
	Yes, to retire	10	7.2
	Yes, to take another job within the Federal Government	29	20.9
	Yes, to take another job outside the Federal Government	6	4.3
	Yes, other	8	5.8

Table *Continued*

Table Continued

Variable	Category	<i>n</i>	%
11. Current tenure	Competitive service--Tenure group 1 (includes employees serving under career appointments).	67	48.2
	Excepted service--Tenure group 1 (includes permanent employees whose appointments carry no restriction or condition).	30	21.6
	Competitive service--Tenure group 2 (includes employees serving under career-conditional appointments).	9	6.5
	Excepted service--Tenure group 2 (includes employees who are serving trial periods, or whose tenure is equivalent to car	5	3.6
	Competitive service--Tenure group 3 (includes indefinite employees, employees under temporary appointments).	1	0.7
	Excepted service--Tenure group 3 (includes employees whose tenure is indefinite).	7	5.0
	NO TENURE GROUP - EMPLOYEES (E.G., TEMPORARIES OR SES).	20	14.4
12. Occupational series	0000 - 0099 - Miscellaneous Occupations	12	8.6
	0200 - 0299 - Human Resources Management	23	16.5
	0300 - 0399 - General Administrative, Clerical, and Office Services	34	24.5
	0500 - 0599 - Accounting and Budget	8	5.8
	1100 - 1199 - Business and Industry	9	6.5
	1800 - 1899 - Inspection, Investigation, Enforcement, and Compliance	7	5.0
	15 Other series with less than six respondents	46	33.1

Note. *N* = 139.